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A Hundred Years Ago.

An educational experiment was undertaken a hundred years ago in Switzerland that has produced mighty results. Pestalozzi was deemed hitherto a man of little ability; his idea was a simple one—it was to "keep a school." This was his mode of relieving the wretchedness that abounded. The school begun at Stanz was closed by the war, but was continued at Burgdorf and Yverdon; at this latter place it was visited by philanthropists, statesmen, nobles, and kings. It was the most famous educational experiment ever made in Europe, probably in the world. Those who construct a modern steam engine little think of the labor and thought of the man who first put water vapor to a practical use. And but few of the teachers who use Pestalozzi's methods to-day think of the man who brought them to light. If a thoughtful person should determine to know something of this remarkable discoverer he would turn possibly to a cyclopedia and find substantially this brief statement:

"Pestalozzi was born at Zurich in 1745; he became interested in the welfare of the masses; thoughtful study of the problem convinced him that a just education was the only means for their happiness. To test his theory he turned his house into an orphan asylum and endeavored to give what he conceived to be the education needed. He employed objects to develop the observing and reasoning powers, because he conceived that the Creator designed the external world for this purpose.

"In arithmetic he began with the concrete and proceeded to the abstract. He gave moral instruction as if he were the father of the group of children about him, incurring in this way the hatred of the religionists who wanted formal creeds (and theirs only) to be taught. This effort to deepen and improve the moral sense and judgment distinguished his school from those that had existed, where a certain formal religious routine was considered the only thing needful to be done to start a young being on the road of right living.

"He produced an astonishing effect on the thinking world; his school was visited by thinking men from all countries. The French Revolution, just closed with all its horrors, had forced statesmen to see that something must be done for the common people

besides making them do the work and pay taxes; no one but Pestalozzi offered a method by which they could be made contented, harmless, stronger, and self-sustaining.

"His methods were immediately adopted by Germany, and gave that country the educational supremacy it still maintains. His seminary for teachers was seen to be an essential element, and was copied there and in other countries; his methods are the basis of those now employed in the civilized world. He died in 1827."

This brief statement, however, would give the earnest seeker after light on the rise of the Pestalozzian methods no clear insight, and we shall endeavor to supplement it with a further explanation, not, however, proposing to do away with the need of reading much literature and of investigating the deep subject of elementary education by careful, prolonged thinking.

Before Pestalozzi's day it had occurred to mankind that it was a good thing to gather children into a room and teach them to read and write, for mankind had seen that a knowledge of these arts was a mighty handy thing in many cases. It does not seem that Pestalozzi felt that not enough people learned to read and write and cipher in his day; he did not, it appears, strive to have more people learn these arts. Some have supposed he was an apostle of universal education—not so; his efforts were not to found more schools; they were to have the school such as would operate justly on the mental and moral powers of the child. All around him were children who had been to school, but he saw they were lacking in something he felt should have been effected in the school.

Pestalozzi was a thinker; his course previous to his teaching experiment shows this. His conclusion was that God had created educative influences, had surrounded the child with them, but that the teacher wholly ignored them. He believed that, as the world caused the body to grow to a normal and beautiful figure, so it was intended to cause a similar growth of the mind and heart. It was *growth*, as we term it, that Pestalozzi aimed at. He did not make reading, writing, and arithmetic the objects of going to school; they were not the *ends* of the school as he conceived it; they were the *means* by which he could obtain an insight of the world in which he lived. He aimed to have the pupil observe the world, to look at things and then use language and number to express his discoveries. This is the central point in Pestalozzi's educational discoveries; he made it by observing the child himself; he had no books from whence to obtain ideas about education; he was a deep student in "child study," though the term had not been invented in his day. He noted, he says, that as soon as a child was satiated at its mother's

breast it turns away to the outside world, that oftentimes it would turn away half fed so delighted was it with the world of objects.

Pestalozzi saw the reason why a child learns so much during the first five years of its life, a mystery to so many. During these years he is under the ministry of Nature, a pupil of a teacher provided by his Creator. Afterward he falls into the hands of a different style of teacher and his progress is slow.

In these days we talk of the need of psychology to the teacher; Pestalozzi declares that his idea was to base his methods on the mode of mental development. "My efforts," he says, "have been to psychologize education;" a statement that can be pondered upon alike with profit by the college president and the beginner in teaching.

Pestalozzi believed that a young human being normally taught would be desirous of doing right; that is he believed that education according to the plan of nature made the child a moral being. It was charged by many in his time that his school did not have enough religion in it, that he had too little faith in the effect of the catechism. What tons of literature, what oceans of words, have been emitted to prove that morality in the child can be promoted only by instructing him in the religious dogmas of his parents! In America the effort has been undertaken to follow Pestalozzi in this regard; the public school is to teach no religious dogmas.

Pestalozzi followed in the footsteps of nature by presenting things to the child and by directing attention to operations with things, and by causing expression concerning them. It was a rule he followed that nothing was to come between the child and the observation; the teacher is not there to tell him. If Pestalozzianism were to be summed up in a single sentence it would be: *Promote the self-activity of the child.*

The effect on the world of the discoveries of Pestalozzi may be compared to a tidal wave; especially was the impact felt in America, though little thinking was given to education at that period. There were, however, a few men in New England who felt the incongruity of the situation; the people had emerged from the second war with England with magnificent hopes of humanity and yet they cared almost nothing for the schools. The two Alcotts, May, Woodbridge, Colburn, Russell, Brooks, Carter, Pierce, Mason, Barnard, and Mann embraced the new ideas; the latter began to preach the new gospel of education.

The effect was prodigious. "America is a grand country for new things," said a noted French observer. People began to crowd the school-houses and churches to hear; conventions were held and teachers' institutes became popular meetings. Normal schools were established; better buildings were erected. Above all, a new spirit pervaded the teachers. They did not claim they could teach more than the routinists; they simply said they proposed to continue the development begun by nature under the auspices of loving parents in the child's home. The people believed there was truth in this doctrine, and as they understood it gave money more liberally.

But education is a deep subject; many have complained that Pestalozzi was obscure when he wrote to

expound his theories; it is conceded that Froebel, his pupil, is far more obscure. It has taken much time to develop the discoveries of these two men; it is only within the past quarter of the century that manual training has secured a foothold in the schools and yet it is plainly built on Pestalozzian ideas. It cannot be said we know positively the best things to be done by the child in the school-room. We are not able to dispossess ourselves of preconceived convictions.

But much has been accomplished in the century that has elapsed since the poor Swiss reformer Pestalozzi began his experiments. We can look back in both wonder and admiration. At all events, the school-house is no longer the place of terror it once was to children: the teacher has become or is becoming the friend of his pupils; it is no longer a crime for the child to be active; spontaneity is encouraged; the love of nature is seen to be fundamental, for nature without operates on nature within. The spirit that animated the school at Yverdon is animating a thousand schools; Pestalozzi did not live in vain.

Miss Maybie and the Class Above Her.

By Frederic L. Luqueer, Brooklyn.

Miss Maybie had been appointed director of a kindergarten to be opened in a large public school in a great city.

"I hope I can make it a success," she said to herself; "for a great deal depends on this first year. If the people get attached to the kindergarten the first year, they will soon make it a permanent part of every school. And, besides, I hate to fail."

Miss Maybie was not given to making wordy resolutions. She was like one whom old Æschylus described as "an unboastful man; his *hand* saw what was to be done."

Yet she could not help thinking, and resolving a little too, during the few days that preceded opening. And then, too, there was a plan to be made of the first week's work. Miss Maybie hoped that every day that week would be clear; and she hummed over the air of "Good-morning, Merry Sunshine." That at any rate would be the song for the first week. And, if it rained, she would tell the children to make believe the sun was shining; and they would greet it, whether or not. And she smiled as she pictured beforehand the class she was to have. Then she went to thinking of the plays and games, the gifts and occupations that were to fill the days. She felt a thrill of pleasure at the outcome. She hoped she would be able to be patient and to win over any hard case she might have. But what if she couldn't win? Well, she would study the case, anyway; she would try to get acquainted with the mother. She would see the home; and then, knowing everything, she could forgive everything; and perhaps patience and power would grow.

There would be child study in her kindergarten. And if there was to be failure in the discipline, why a study of the causes of that failure would be of value; and she laughed at the cold comfort of the thought. Miss Maybie's mind often took a negating attitude. But that was only Plato's black horse of the soul which, strong charioteer that she was, she soon reined in and made to amble along decorously in expected ways. "Oh, dear," said this negating mood of hers, at this movement, "what a tiresome thing that child study is. Franky, aged 3 years, 6 months, and 15 days, said so and so; and Daisy, aged 485 days and 10 hours, made an exclamation never before heard

from her—and so on, *ad infinitum*. And what does it all amount to? To tell the truth, Franky's and Daisy's doings seem very flat; and one belittles herself if she thinks about toddlekin's doings all the time."

Then Miss Maybie began to drive away this thought. "But one must have wider view," she said. "Child study is one window looking out upon all of humanity."

Thinking of this, a fancy came into her head. There came a memory of the Sistine Madonna. "See," she said to herself, "even the Madonna is not limited by her child. She holds it close; but then her eyes look straight forward, and out into the depths and mysteries of life that surround her." So the child student, she thought, was not to be limited to child-observation, but was to seek an interpretation as wide as humanity itself.

II.

Miss Maybie had had the kindergarten now for two weeks. She was more than half pleased with its progress; though it seemed very far from what she intended it to be. She might have been more pleased; for to an observer, unaware of the ideal which she had set herself, the kindergarten seemed beautifully conducted. You might enter the room, and at once you felt the happy air. In the first place there were the forty little children—not too many, for Miss Maybie had an efficient assistant. As a visitor you do not feel responsible for the children's conduct; so you are free to be touched by the mingled pathos and comedy of the scene. You forgot your own fight with fate or fortune as you watch the children. Their faces are the early morning; and in their shine you feel indeed that

God's in his heaven,
All's right with the world.

And then you see what a piece of art the whole program may be. Under one aspect, the children are a delicate musical instrument. How deftly the light touch of the teacher brings out now a note of discovery, again a tone of triumph at some happy invention, and then a merry symphony of voices, hands, and feet, amid the games of chickadee or butterfly.

Miss Maybie, you see, is an artist. Just now she has forgotten technical rules and classifications of theory. There is a pattern in her soul of what she wants to achieve to-day; and she is working it out as naturally and whole-heartedly as are the children themselves. For the moment, "Come, let us live with our children," is more than a motto. While teaching and leading, Miss Maybie forgets herself, or, rather, broadens out, so as to be merged in the little world she is shaping into order and beauty. You see here a picture of freedom—of unhampered movement toward the realization of the ideal; and you think, perhaps, that Miss Maybie's face as well as that of the Philadelphia kindergartner might have been chosen as the model for the head of Liberty on the coin of the United States.

III.

Well, the period of self-estrangement—of absorption by the outer—as Rosenkranz might say, was over. There was now the return to self—a passing judgment on the work of the day and a planning for the next. At least that was what Miss Maybie said to herself as she rode homeward in the car. But with a half sigh she deposited her black silk bag beside her and opened the book which she was reading to and from school. Miss Maybie did not wish to stay in a rut. She loved books and wanted to live in as wide a world as she could. Now, it was "The Marble Faun" she was reading. She almost wished she was as good and fair as Elsie (as a matter of fact, she was, nearly); but to herself she seemed often a combination of Miriam and Donatello together. That very day, for instance,

did not little Samuel in the kindergarten prove aggravating? And if there had been a precipice in front of him (she thought now with self-reproach) she might have been tempted to push him over. As it was she had sent him home, which was almost as bad.

But this after-school reading time was to be sacred to self-culture; and school problems were to be banished—"procul, procul, O profani," she said, with a half memory of Horace. So she read on. She came to the place in which Hawthorne spoke of the sculptor's work as if it were a freeing of the statue already present in the marble block. Of course she had often heard that figure used to illustrate also the work of education. But at this moment it came with new force; and Miss Maybie could not rid herself of it. "Only see," she said to herself, "how much more difficult the work of education is than sculpture. From the marble, one artist brings out his own design. But in school, think of the different teachers, each knocking a chip off here and another there; and no one very well aware of what the others have been aiming at."

And now Miss Maybie shut the book. Her mind brought her to a personal accounting. What had she done to make her own aim clear; and how had she tried to find out the aim of the teacher of the class into which her kindergarten children were going? As a matter of fact, had she not been regarding her work as a separate little garden, or picture framed off from surroundings? Had she not been satisfied in making its work pretty and its spirit gay, without much considering what was to be done in the next class?

To be sure she had thought of the next class; but then it was with a feeling of pity that her little *Kinder* had to leave the sunny kindergarten for the rigid rows and prison-like seats of the primary class—from nine to three, too, poor things, think of that!

"Nevertheless," thought Miss Maybie, "the children can't be kept little all the time; they must grow out of the kindergarten into the other classes. I must realize that more and more."

"And why shouldn't the kindergarten prepare for this next class?"

"Oh, but," said Miss Maybie's negating mood, "the next class is such a cramped affair—its freedom so limited, and its spirit so poor that, certainly, preparation for it cannot be taken as the kindergarten goal. And yet, isn't my kindergarten in the school just to make these upper classes better worth the going into?"

Here Miss Maybie stopped short. "What a Pharisee I am!" she thought; "with my 'Thank thee, I am not as other men are.' Perhaps I could learn a good deal myself from these upper teachers. In the first place, the conditions of their work are harder. Their hours are nearly twice as many; and they have perhaps, three times the number of children to deal with.

Then they haven't the games of the kindergarten, nor the variety of fascinating material to help them in gaining interest. Then, too, there isn't the picturesque about their work to attract the notice of the public, which the kindergarten receives. They haven't the ready praise and congratulation bestowed upon the kindergarten."

"Now," thought Miss Maybie, "if they do good work under these harder conditions, should not I honor them the more?" And as Miss Maybie left the car, she determined she would go more than half way in being friendly to the teachers in the school. She also determined to know what the work of the upper classes was like. "Perhaps there can be help both ways," she thought.

The next day Miss Maybie stayed after kindergarten had been dismissed. During the afternoon she visited the class of the teacher next above.

"May I stay here this afternoon?" she asked the teacher; "I want to see what my children are coming to. Perhaps I can prepare them for your work."

Fortunately, the teacher whom Miss Maybie visited

was quite self-possessed; and enjoyed having visitors.

"Oh, yes," she responded; "but I'm afraid I can't show you very much. They are such little things, and want so to move around. It will be a great victory when I can keep them still in these seats."

But she was better than her word. She did not mean that it was her ideal that the children should sit like stone figures—like the seated statues of Memnon, uttering never a sound save when blown upon by some chance wind from the desert. But during lesson periods it *was* necessary that seats should be kept, and that tongues, save those reciting, should be still.

And Miss Maybie marveled at her success. The children were as interested in the sounds and appearances of the letters and words as ever were children in the gifts and occupations of the kindergarten. Seldom had she seen such enthusiasm displayed as during the drill in phonics. The eager way the little hands went up, seeking to gain permission to tell the sounds, and the self-restraint shown by the children in awaiting their turn to call, were truly wonderful. And then there were the words written on the blackboard—ever so many words; so that there might be a hunt for the one called.

Then Tommy, or Eddie, with his pointer would go searching for his prey among these words, and would be as exultant as any hunter, when he found and pointed out the right one.

Then, as a change, there came the song of the blacksmith, and the little faces deepened into hearty earnestness as they sang the song, and hammered rhythmically, with little clenched fists, upon imaginary anvils.

"Why, this is kindergarten," thought Miss Maybie; "and the children seem to realize what they are doing, more than they do in *some* kindergartens," she added to herself.

After singing, the children were busied with some clay modeling. While they were working at this, Miss Maybie aided some of the fingers that seemed all thumbs.

"The kindergarten work would help prepare for this work," she said to herself. "Had these children had a course in the kindergarten, their fingers would be much more manageable."

At this point, Miss Maybie happened to be near the teacher. Miss Maybie directed her attention to a little fellow with rather long, yellowish hair, and unkempt appearance generally. "Yes," said the teacher, "that's one of my problems; he is often rude and boisterous, and does a lot of mean little tricks. But he likes to do things for me; and is very good when distributing materials about the class. He has powers of affection, too, I think. Yesterday I called at his home. It was poor enough to account for all his ill looks and ill doings. But he showed me his cats. He was very fond of them and they looked as if they had been well cared for."

And then Miss Maybie told her of a similar case in her kindergarten—the very Sammy who had so often tried her patience. And both these teachers understood each other the better, as they saw that each had like problems to face.

When the period for modeling was over, the teacher asked Miss Maybie if she would be good enough to teach her children one of the movement games they had in the kindergarten. "See," she said, "during recess we could go into the large kindergarten room which is free from desks; there will be a chance for freer movement than can be had in here. And these children need it, too; they have too much sitting."

So Miss Maybie brought them out into the large room. And then they played "The Snail," and other games, in which birdies lopped about and seemed to fly with wings. There was as much glee and happy movement as in the kindergarten itself.

Then the children marched back into their room and to their desks; and were busied with a writing lesson.

As Miss Maybie watched them, she thought: "After all, they like their work at their separate desks. Each one becomes a little proprietor of his own domain. Each belongs to the class, to be sure; but each has his own desk and his own task. The desk may be a starting point for growth in individuality; and the feeling of self-directed power and of responsibility may be born here."

Then Miss Maybie, with a word of thanks, said "Good-bye."

IV.

As Miss Maybie went homeward, the thought came to her that the kindergarten had perhaps been neglecting an opportunity.

"The kindergarten is to prepare for life," she said. "That's told us often and often. It is to have a very real life of itself, too; and that is told us repeatedly. The games and occupations give business to a very real child-society; and the games and occupations are meant to prefigure and to interpret the labors of the older people's society. The child gets to know the work of the shoemaker, the blacksmith, and baker. He values them, and is interested by them. And this interest is awakened by the talks and games."

"Now, why," thought Miss Maybie, "should we try to make interesting these trades and other life-work, participation in which is really many years distant from the child; why do we make these interesting, and invest them with a halo of poesy, while we forget to picture to the child the school days that are coming? Shouldn't we have games and songs and occupations that play school, as well as those that play at a trade? Cannot we so interpret the work of the school that is coming that, even in the kindergarten, the child will look forward joyously to entering the classes above the kindergarten? Cannot we make him think of books as the storehouse out of which we have gained the pretty stories that he has heard, and make him feel that 'learning to read' will give him a key to that wonderful treasure-house? And so with the other things that must be learned in school."

"Yes," thought Miss Maybie, "just as there is a game of baker or blacksmith, there ought to be a game of school."

V.

The first Saturday morning, thereafter, Miss Maybie spent in trying to invent a game of school that would be a beginning of what she wanted. Gradually an idea formed itself. It was something like this: The kindergarten children would be separated into little groups of four or five, and would start out from a make-believe home, bidding "good-bye" to mother. Then the mother (represented by kindergartner or by children) would hand them books and pencil-box, with a word of good wishes. Then the little school children would pretend to come before the school and enter the new class. And there must be something said to suggest the work to be done, and to clothe it with some little grateful fancy or other.

Then Miss Maybie started in to make a song that would fit all this. She was rather frightened at the undertaking. "But then," thought she, "Froebel himself made some pretty poor songs, poetically considered." So, in the light of this comfort, she made her first stanza. It ran:

"Mother, now good-bye," we say,
"Off to school we go away;
We won't flit as if with wings,
We'll walk sedate as older things."

"There is a wrong foot in that last line," criticised Miss Maybie. So she tried again:

"Good-bye, mother dear," we say;
"We're promoted; from to-day,
We won't scamper any more;
We will walk as if fourscore."

"But the thought of that won't do," again criticised

Miss Maybie. "The solemnity of promotion time is rather overexpressed. I wanted to put something about their gladness at going into a higher class. And then, too, they *must* scamper, every now and then, if they want to, for many a year yet."

So again. Children sing:

"Good-bye, mother dear," we say;
"We're promoted; so to-day
Teachers new we must obey;
They will tell us wondrous things,
Making us as glad as kings."

Then Miss Maybie wrote on: The mother sings:

"Here are books and papers wise,
Whispering what's in earth and skies;
Love them as your truest friend;
They'll delight you to the end."

Children march, and approaching "make-believe" school, sing:

"Here's the school with doorway wide;
We're most 'fraid to go inside;
We'll be lost among the halls,
And the silent-standing walls.

But we'll meet our duty bravely,
Teacher's there to lead us safely;
And the halls and walls, they love us,
Bending kind their heads above us.

'A, B, C,' we'll learn to-day;
That's to know what books may say;
'One, two, three,' we'll count together;
That's to help with father's ledger.

And in times between we'll sing,
Gay as lark upon the wing;
Then we'll do our best to know,
For we love to learn and grow."

"There!" said Miss Maybie. "If the little things will only understand all that that means! But at any rate, we will try it. The teacher who gets them will be glad to have them come with that feeling." And then the little that was left of the Pharisee in Miss Maybie, said: "I only hope she won't give them a rude awakening."

Teachers' Pensions in Our Country.

By L. Seeley, Professor of Pedagogy, State Normal School, Trenton, N. J.

The pension question is now attracting the attention of teachers throughout the country. Indeed, it is a question that has been far too long delayed when one considers its importance, not alone to the teachers, but to the schools themselves; for whatever strengthens and improves the character of the teachers is a benefit to the schools. It came near causing a serious rupture at the late meeting of the N. J. State Teachers' Association, because the friends of the retirement fund urged that "this is the one live topic in educational circles," and sought to force that idea upon the association. While it was willing to concede the importance of the movement, and was willing also that those of its members who are interested shall control the fund, the association was not willing to subordinate all other interests to this one, nor to make the work of our educational association the "tail of the retirement fund." There are certainly many more important questions connected with our profession than this.

That there is growing interest in pensions is shown by the fact that during the last three years seven states have enacted laws upon the subject, covering a whole or a part of the state. In California and New Jersey these acts affect the whole state; in the other cases they affect only the large cities. There are also relief associations among teachers in a number of the large cities, which are governed by the teachers themselves without any reference to civil or municipal statutes. The latter have sprung up within the last twenty years in sympathy with the remarkable growth of mutual benefit associations among all classes of people in our coun-

try during that period. It is a recognition of the guild principle, and seeks, by laying aside a portion of the income of to-day, to provide for old age, sickness, and disability. In a word, it takes proper thought for the vicissitudes of to-morrow. That such action is wise and provident needs no argument. Fortunately, however, there are plenty of such organizations whose membership is not limited to teachers only, but to which teachers are most cordially welcomed. Thousands have availed themselves of these opportunities, just as other men have done, and have provided against disaster, in companies that are sound financially, and upon the fulfilment of whose promises there is no doubt. Thus, teachers' associations of this kind are not an absolute necessity, though there is no objection to them if they are founded on a sound financial basis. On any other basis, they are a menace to society, if not a crime. They induce persons to contribute of their scanty income to the establishment of a fund from which they hope to receive benefit at some future time when in need, which hope is sure of disappointment to a large part of the contributors, if the financial basis is unsound.

Mutual benefit associations, however, do not properly come under the head of pensions. No one would think of calling an annuity from a life insurance a pension, and teachers' benefit associations seek to provide an annuity, or a stated weekly or monthly sick benefit. We may therefore omit a further discussion of them.

The general plan for pensions in this country may be summarized as follows:

1. Membership is voluntary, though in Chicago, Detroit, and Cincinnati it is compulsory, while in New York and Brooklyn it is compulsory upon all future appointees.

2. One per cent. of the salary of the member is reserved to create a fund from which the pension is to be paid.

3. After twenty to thirty-five years of service, in some cases with, and in some cases without, disability, the teacher receives a pension equal to one-half of his salary, the maximum being fixed at from \$400 (in Detroit) to \$1,200 (in Brooklyn), the usual maximum being \$600.

That membership should be voluntary is certainly a sound principle, if a percentage of the salary is to be deducted, as the teacher should have the right to control his own salary. If any exception is made, it can be only with those who enter the service after the law is in effect, as it may then well be claimed that the withholding of one per cent. is a part of their contract, which could not be claimed with those in the service before the law is in force. An effort was made last year to make membership in New Jersey compulsory with all teachers, but this was defeated. It may be questioned whether such an act would be constitutional, as it would be a direct tax not "in proportion to the census" last taken.

In some cities the board of education, in addition to administering the fund, turns into it moneys withheld from teachers for absences. It is proposed also to augment the fund by fairs, lectures, endowments, and other means.

It would seem that the weakness of this system lies in the inadequacy of the probable income to meet the probable outgo. This is certainly a most important consideration, from a business standpoint. Any life insurance, or any other business, that would promise to pay an annuity of from \$250 to \$600 to a person contributing from \$5 to \$12 a year, for say twenty years, would be classed as a "wild-cat scheme." To illustrate: We will suppose that a teacher drawing \$500 salary pays one per cent. a year for twenty years. He will actually pay in \$100. But he would be entitled to draw \$250 pension the first year, and the same amount every year thereafter as long as he lives. This

would be a pretty good income on the investment, even if the annuity held for but one year. Almost any one would be glad to invest \$5 a year for twenty years if he could be assured of a \$250 annuity, but the company that would undertake the business end of that proposition would fail to inspire confidence. Even admitting that there would be many lapses on the part of teachers who have left the profession, which would add to the fund without making demands upon it, and also that the fund could be materially augmented by donations, fairs, etc., it would seem that the demands upon the fund will necessarily far exceed its ability to pay. Let us take another concrete example, involving all of the teachers of a city. The salary budget of the teachers of a certain city is about \$90,000. Now, supposing all the teachers contributed one per cent. of their salaries to the retirement fund; there would be an income from this source of \$900 a year. Now, there are thirty-six teachers who have served twenty years or more, and, who, therefore, come within one of the conditions of the law as follows: "Whenever any teacher entitled to the benefits of this act has taught in the public schools of this state for a period of twenty years, and shall become incapacitated from performing the duties of a teacher, such teacher shall, at his or her request, or may, at the discretion of the board of trustees of the Teachers' Retirement Fund, without such request, be retired as a teacher, and shall thereafter receive an annuity out of said fund of a sum equal to one-half of the average annual salary received for the five (5) years immediately preceding the time of retirement; provided, that no annuity granted under this act shall be less than two hundred and fifty (\$250) dollars or more than six hundred (\$600) dollars; but in case any teacher should be retired within five (5) years after the passage of this act, he or she must, in order to receive the benefits thereof, pay into the fund provided for in this act a sum equal to twenty per centum of his or her annual salary at time of retirement." There are two conditions to be met, and then every one of these thirty-six teachers is entitled to an annuity: 1. To establish that they are "incapacitated from performing the duties of teacher"; and 2, to pay into the

fund twenty per cent. of their last annual salary.

As to the first condition, it is to be hoped that years may elapse before these faithful teachers shall be "incapacitated." But when it is remembered that eighteen of them have taught over 25 years, ten over 30 years, and five almost 40 years, it is evident that incapacity or death must soon retire them. If all were to retire and pay 20 per cent. of their last year's salary into the fund, they would contribute \$4,700 once for all to the fund, and be entitled to \$11,300 each year thereafter as long as they live. The plain business statement is, an investment of \$4,700 yields an annuity of \$11,300. Carry the analysis further: Suppose the ten who have taught thirty years should retire at once. They would make one total contribution of \$1,580, and would draw an annuity of \$3,400. Once more, if the five who have nearly forty years to their credit should retire, they would pay in \$580, and draw an annuity of \$1,450.

These concrete illustrations have been drawn from the old teachers, who may soon take advantage of the benefits of the retirement fund. Even if we add the \$900 income from the one per cent. of the total salary list, and allow liberally for interest accumulations, it is clear that the assets must ever be sadly insufficient to meet the liabilities. The example given is probably an exceptional one, and it is a fair example of the condition which exists in other cities.

From a business standpoint, then, it appears that the proposition is a preposterous one. There must always be many claimants whose expectations cannot be met, and who will be doomed to disappointment. The only way that this weakness can be removed is by doing exactly what other mutual benefit associations do; that is, charge each member with a sum sufficient to provide for contingencies. To do that would be a large drain upon their resources, which many could not stand; and if any should be able to do so, wisdom and foresight would naturally lead them to an association which is founded upon a sound financial basis; whether it be an association of teachers or otherwise. Fortunately, there are plenty of such associations in the country.

If, however, we view the question from the standpoint of philanthropy, or of a fellow feeling for the aged, and incapacitated in our profession, or of a desire



Masten Park High School, Buffalo, N. Y.

to relieve the distress of those who have long served their fellow-men, and are no longer able to do so, it is certainly noble and praiseworthy. An association among teachers with such aims in view would be a great blessing. Teachers would be doing for members of their profession just what other professions and trades are doing for their brethren, and such action would cultivate a fraternal feeling sadly lacking among us. Such associations already exist in Baltimore, St. Louis, Cincinnati, Cleveland, Chicago, and other cities, and their benefactions are in no sense pensions. They are on a sound financial basis, because they tax themselves for specific cases, and are thus always able to keep their agreements. But the pension laws of our country are not philanthropic in their purpose, nor do teachers, as a rule, become members of retirement funds for philanthropy. The law makes no distinction as to the needs of an annuitant. Only two conditions are laid; namely, length of service and incapacity. A teacher with an abundance of this world's goods, in whom both of these conditions are met, has a just claim for a pension the same as the teacher who is poor. The law, therefore, is not philanthropic in purpose. How many of the members of a pension fund would enter if it were simply for the purpose of helping others in need? I do not impugn their motives; they are confronted every day with the poor at their door; and nobly do they respond to the cries for help; it is not at all strange that they would not contribute to a fund that is to pension some one they possibly do not know, and who possibly does not need the help, simply from philanthropic motives. They give, indeed, to help some now needy, in the expectation of receiving help themselves if they are ever needy. They give, also, knowing that for a small contribution, they may receive a comparatively large annuity. Having thus contributed to the fund, they regard their annuity as their just right, and not in any sense as a gift, even though they know that the sum they receive is ridiculously out of proportion to what they have contributed. In no sense is the present plan of pensions in various states based upon philanthropy.

But do not teachers deserve pensions, and if they do, upon what rests the duty of providing for them? I believe most emphatically in the principle of teachers' pensions, and I believe just as emphatically that it is the duty of the state to assume this just burden. The average monthly salary of male teachers in the United States for 1895-96 was \$47.39; that of female teachers was \$40.24. This is less than half the salary of the policeman of most cities, and far less than the income of men and women in other professions requiring like preparation. I urge that the state should pension its teachers after due service, or when incapacitated, for the following reasons:

1. Because the teacher is a state officer, licensed and supported by the state, and devoted to the interests of the state more than any other servant.
2. Because he is inadequately paid for the services rendered, as above shown, and from the nature of his work, is shut out from most of the opportunities for personal gain that other men have.
3. Because the duties of his profession unfit him for other callings. He thus sacrifices himself for the state, for the work of education is the duty of the state, and in consecrating himself to teaching, the teacher thus consecrates himself to the state.
4. Because its own self-interest demands it. Such a recognition would attract more teachers, lead them to better prepare themselves, and hold them longer to the service. These things would certainly bear abundant fruit to the state.
5. Because it will tend to make changes fewer, and the tenure of the teacher's office more permanent. The children directly, and the state through them, would receive great good thereby.

6. Because it would raise the standard of fitness of teachers, for the state would be more careful as to whom it admits to the profession.

7. Because it would remove much of care and anxiety from the teacher, and allow him to devote his whole soul to the interests which the state has committed to him.

8. Because it is an act of simple justice to a class of devoted men and women who have consecrated their lives to the service of the state, and have received no adequate compensation therefor. The state has no more right to allow these faithful servants to suffer or be in want than the general government has a right to allow its old soldiers to suffer. The duty of the one is as imperative as the duty of the other, the teacher, if anything, having the superior claim. Nor is the one a pauper any more than the other. It is simple justice.

In conclusion, I do not want to be considered an enemy of pension movements of teachers themselves. My whole argument has been to show the unsoundness and inadequacy of the present movements, and to insist that the state must assume this responsibility. No scheme of self-taxation on the part of the teachers can accomplish the end desired, nor excuse the state from its duty. Let teachers do what they can for one another in relief associations, and by private enterprise; let the warmest sympathy and the noblest fraternal feeling everywhere exist among them, so that no brother or sister shall be in want; but as a matter of principle, of right, of justice, let all insist that the state cannot escape from this part of its duty; that of pensions for its teachers.

The Heavens in March.

On the 20th of the month, the sun enters the sign of Aries, and then hastens northward of the equator, bringing with it the spring. The moon has two conjunctions during the month, both with Neptune, on the 1st and 28th. It is nearest to Neptune on the 9th, but the moon is so near the full that its light is too strong to make the scene picturesque. The moon falls on the 28th, with its last quarter on the 15th. A new moon appears on the 22d, with its first quarter on the 30th. Saturn is at the quarter point of his course on the 2d, on his way toward opposition, when he will remain in sight from his rising until daylight. Jupiter will be in opposition on the 25th. He will then rise about sunset, and will shine with his greatest brilliancy. From the 25th until October, he is an evening star. Uranus is a morning star, during the month, but is too far away to be seen by the naked eye. It is at present in sixteen hours, six minutes, right ascension, and twenty degrees, forty-two minutes, south declination, in the group of the Scorpion. It will be in conjunction with the moon on the 13th. Mercury becomes an evening star on the 16th, at which time he is in superior conjunction with the sun, and begins moving eastward. Mars is at this time only about one-third of the size that he will appear later. He comes closest to the moon on the 19th. Venus is once again an evening star, but not visible just at present. She will appear in the western sky soon after the sun has set, and we may look for her next month in all her loveliness.

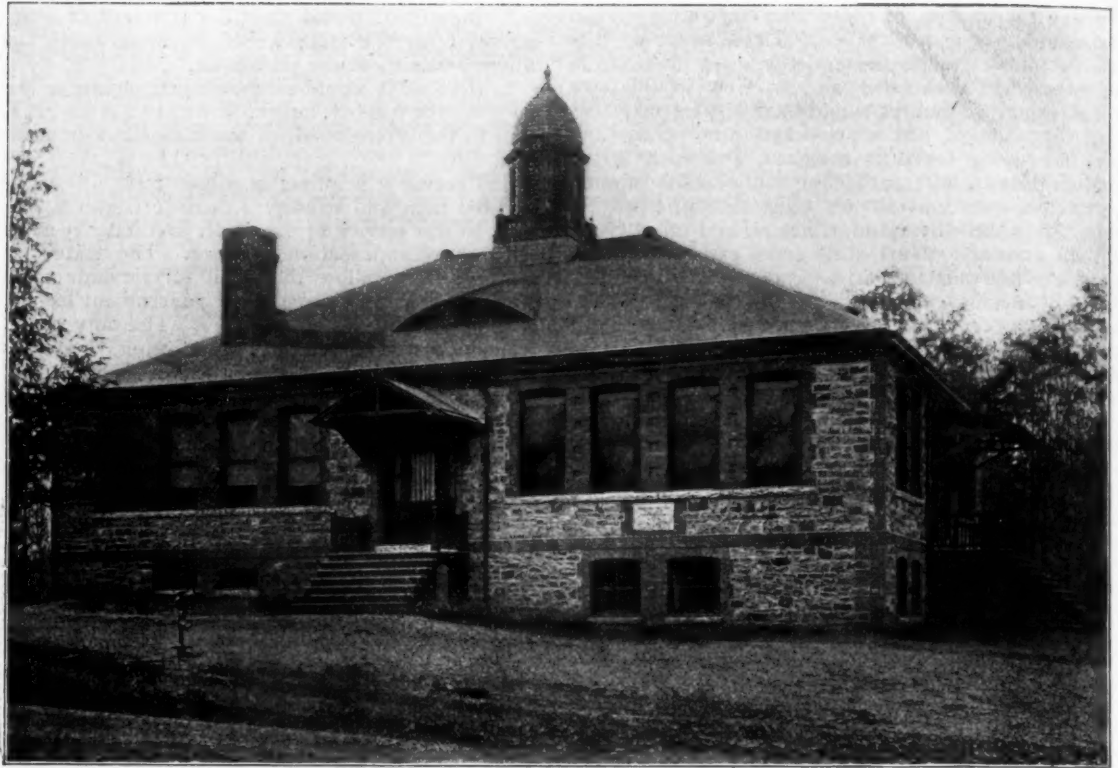
A Stone School House.

About a year ago there was built at Pocantico Hills, N. Y., a four-room stone school, which is well adapted to meet the need of the smaller towns and villages of the country.

A limited competition was held, with the result that the plans of Mr. C. Powell Karr, of 70 Fifth avenue, New York, were adopted by the board of education.

While in this case the design is carried out in stone, it is equally well adapted for a frame school-house. The masonry was laid up in cement mortar, the jambs for the windows and doorways being laid with bricks, while architraves, arches, and sills are of stone.

The floor and ceiling joists are of spruce, and the rafters are footed into the places with bird's-mouth joints. All window and door openings wider than three feet are strongly trussed. The roof support over the separate class-rooms is by means of posts. Over the assembly-room, or that portion of the building which is divided into two classrooms by means



Public School Building at Pocantico Hills, N. Y. C. Powell, Kansas, Architect.

of a sliding partition, a truss supports the ceiling beams. The roof is covered with cypress shingles. The cupola, or tower, is built of wood.

The outside steps are of hard pine, and the approaches to the basement in the rear are of stone and brick, inclosed with gas-pipe railing. The basement has a concrete floor throughout, and the chamber containing the heating apparatus is inclosed in brick walls. The floor is double, the under surface of spruce, the upper, of North Carolina pine.

The floor plan shows the arrangement of the rooms and their purposes. The two rooms on the right of the hall can be used for classrooms, or thrown into one large assembly-room. Each classroom is provided with a patent flexible ventilating cloak wardrobe from the Flexible Door and Shutter Company, 74 Fifth avenue, New York city.

The wainscoting in the school-rooms is of cement above a low base board. The walls and ceilings are made with three

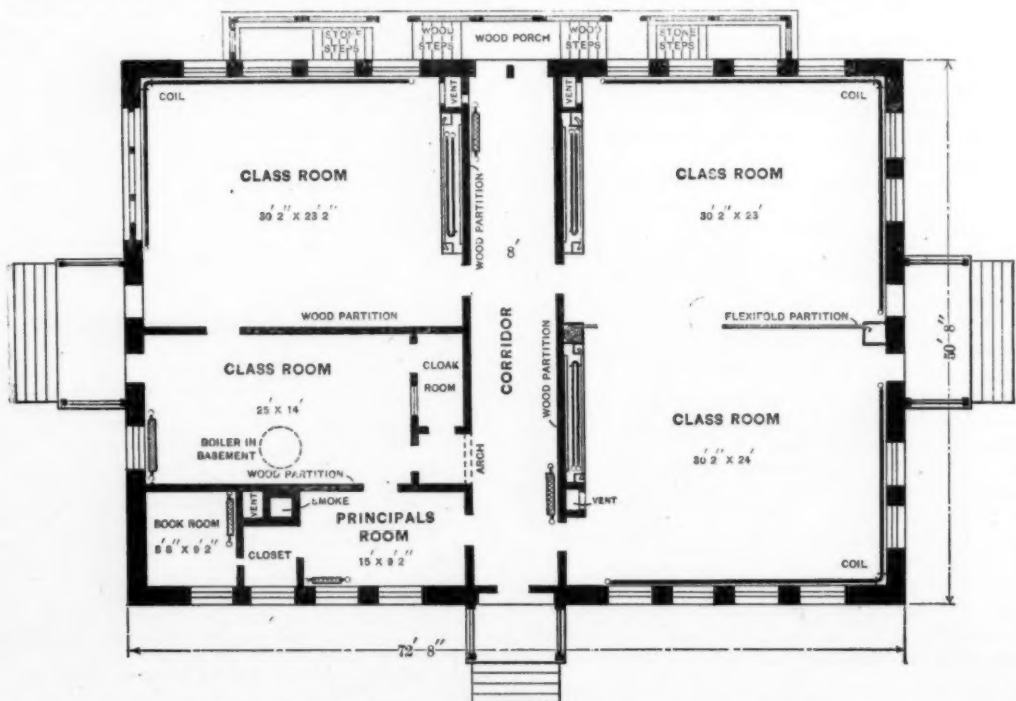
coats of King's Windsor Cement. The woodwork is natural finish throughout, having one coat of filler and two coats of varnish, the latter rubbed down to a dead gloss.

The steam heating was put in by the Nason Manufacturing Company, 71 Beekman street, New York city. Each coil has a separate return directly to the boiler, to insure a positive circulation without noise.

The placing of the windows causes the light to fall from the left and rear of the pupils. In lighting, heating, ventilation, and design, the Pocantico school-house is an example of good modern equipment. The approximate cost was \$9,000, and the time of building a little over three months.

The site of the building is the gift of Mr. John D. Rockefeller, and the fact is commemorated by a tablet on the front of the building.

For the use of the cuts we are indebted to the courtesy of the publishers of "Carpentry and Building."



School at Pocantico Hill's, N. Y. Main Floor. Scale, 1-16 inch to the foot.

LOCATION OF INSTITUTIONS

JANUARY 1, 1898

Interior heavy lines represent boundaries of county groups according to the decimal classification used in the state library.

- = college
▼ = academy
▲ = high school
+ = public library
L = law school
T = theological school
S = special school



School Equipment.

Under this head are given practical suggestions concerning aids to teaching and arrangement of school libraries, and descriptions of new material for schools and colleges. It is to be understood that all notes of school supplies are inserted for purposes of information only, and no paid advertisements are admitted. School boards, superintendents, and teachers will find many valuable notes from the educational supply market, which will help them to keep up with the advances made in this important field.

Correspondence is invited. Address letters to *Editor of THE SCHOOL JOURNAL*, 61 East 9th street, New York city.

Manual Training Outfits.

For the whittling course adopted in some schools, a set of tools has been made, with a desk top to be adjusted during its use.

The desk top is made of pine or white wood with cleats across the ends and ribbon disks on the bottom to prevent scratching the regular desk. The service end of the top has a hard wood piece to rest the work against. Both of these parts are easily removed and turned about, or they may be replaced when worn out.

The outfit of tools is a compact arrangement in a case of instruments for a class of twenty pupils.

It contains twenty knives with heavy blades; four steel try-squares, pencil compasses, sand paper blocks, rules, pencils, and

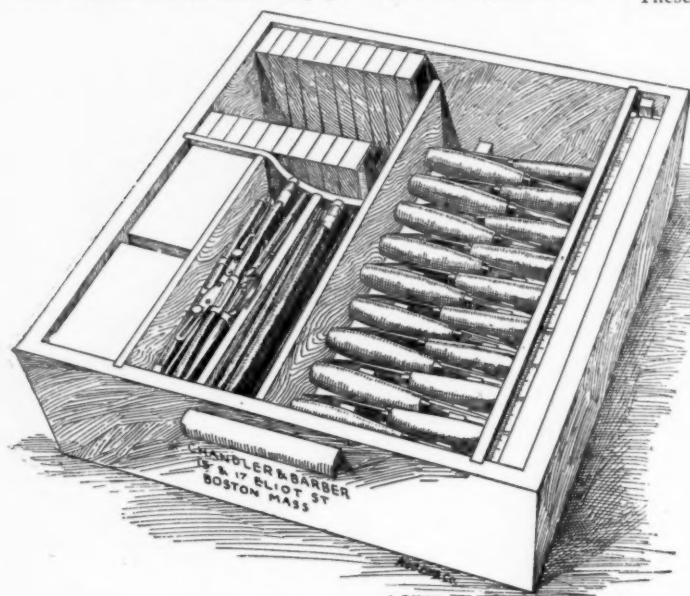
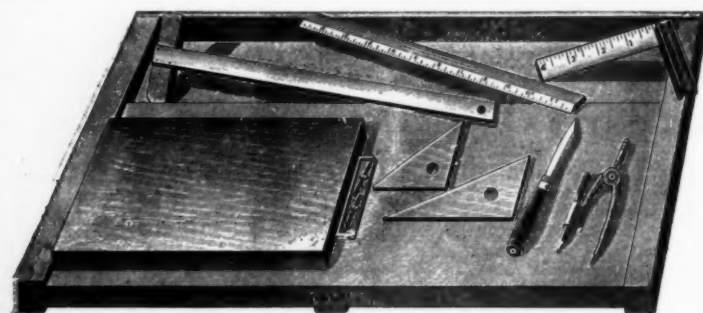


chart of twelve models designed by Gustav Larsson, principal Sloyd Training School, Boston. (Chandler & Barber, Boston.)

Sloyd Tray With Tools.

This very complete and practical combination whittling-tray with outfit of tools, originated in Pratt institute, Brooklyn, where it has been adopted as a standard. The tray, which is carefully made out of thoroughly seasoned lumber, measures $12\frac{1}{2} \times 21\frac{3}{4}$ inches. It has a unique clamp, which will hold a block up to nine inches wide, and a recess, 4×20 inches, for tools.

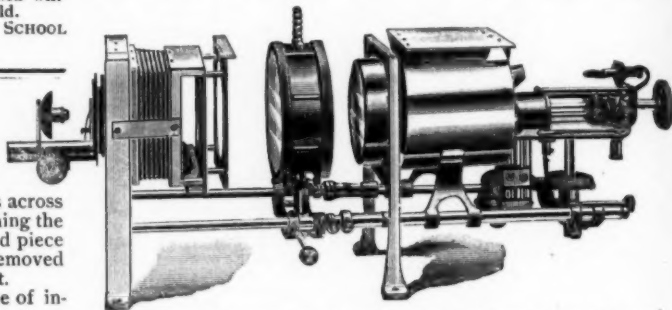


The tools are well adapted to the work for which they are intended, and are up to the usual high standard of the manufacturers, Hammacher, Schlemmer & Co. The knife is their No. 7, of the same quality and finish of their special sloyd knives, Nos. 4 and 6, but it is made smaller, having a $2\frac{1}{2}$ -inch blade, so that it can be used by young children.

For terms, address the manufacturers, at 209 Bowery, New York.

The "Ideal" Electric Light Lantern.

This lantern, owing to its adaptability to all the various forms of light, oil, lime, gas, and electric, is particularly desirable for school and college use for the correct and rapid exhibition of lantern slides. The arc lamp, as shown in the illustration, is of novel design and construction, the carbons being arranged on the 90-degree plan, the result being an increase



of nearly 25 per cent. in the volume of light over the old style, vertical carbon lamps.

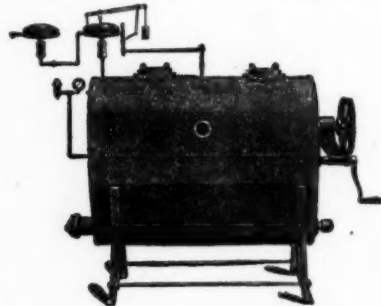
These lamps will burn two hours without changing carbons, and fifteen minutes without turning the adjustment wheel. They may be used on either the direct or alternating system of lighting, a double set of gears being fitted to each lamp. The change can be made from one system to the other in one minute. Every lamp is tested for fifty amperes, or five times the usual amount of current passed, and the insulation will stand 500 volts indefinitely, without injury. The metal hood, which nearly surrounds the arc, answers a double purpose, inasmuch as it excludes all light from the room, and absorbs the heat, and dissipates the same to other points than the condensing lenses. Peep-holes in these hoods, covered with mica, enable the operator to examine the arc at all times.

The illustration shows that provision has been made for the use of the microscope and attachment, vertical attachment with lenses, water cells, etc., for chemical and physical laboratory use. The slide carrier and bellows are detachable at the condensing lenses, thus providing space for the introduction of the above-mentioned apparatus. The bellows have a sufficient extension for the use of objective lenses, varying in focus from three to twelve inches. The lanterns are provided with microscopic registering devices, both horizontal and vertical, making it possible to exhibit any mechanical effects with perfect accuracy.

In connection with this apparatus it is interesting to note that the manufacturers have lately supplied the following schools: State normal school, Providence, R. I., with optical projection; Harvard university, a complete dissolving, electric light stereopticon; St. Johnsbury academy, Vt., a time-light, dissolving stereopticon; some of the Boston public schools with improved electric-light lanterns. (A. T. Thompson & Co., Boston.)

An Acetylene Generator.

The plan of the acetylene generator, made by J. B. Colt & Co., commends it for simplicity, safety, and inexpensiveness. In the upper section of the steel tank, shown in the illustration, is a cylindrical steel cage, which holds the carbide. This cage is hung on a shaft geared to and revolved by the handle on the right. The water is held in an auxiliary tank, and is fed down a sprinkling tube in the steel tank, and drips down



on the carbide in the cage, which rapidly decomposes the carbide and generates the acetylene, which finds exit through the pipe on the left, and passes through a pressure regulator to the house supply. As the pressure raises in the tank it correspondingly raises in the water pipe and the automatic regulator. When a certain pressure is reached, the regulator automatically cuts off the water supply, preventing any further admission of water on the carbide. (J. B. Colt & Co., 115-117 Nassau street, New York city.)

Text-Books on Geography.

(This article is continued from *The School Journal* of February 5. Descriptions of the geographies published by the American Book Company, Ginn & Co., The Macmillan Company, and Silver, Burdett & Co. appeared in that number.)

Tilden's Commercial Geography and Tilden's Grammar School Geography.

(Leach, Shewell & Co., New York, Boston, and Chicago.)

These books occupy a field peculiarly their own among modern geographies. They make a specialty of that phase of general geography which relates directly to the production and interchange of the leading commercial products of the world.

The "The Grammar School Geography" presents the material in a form adapted to pupils of the higher grades, while the "Commercial Geography" is designed for secondary schools.

In the "Commercial Geography" a terse review of mathematical, physical, and political geography is furnished to better

ples and Clothing Materials; Chapter V., The Great Commercial Staples and Mineral Substances; Chapter VI., The Great Commercial Staples and Miscellaneous Commodities; Chapter VII., The United States; Chapter VIII., The British Empire; Chapter IX., Germany, France, Spain; Chapter X., Other European Countries; Chapter XI., The Southern American Republics; Chapter XII., Mexico, Japan, China, and Other Countries. Supplement, mathematical and physical geography. The volume includes nineteen maps and charts, and thirty-eight photographic illustrations.

Maury's Geographies.

(University Publishing Co., New York.)

M. F. Maury, LL. D., late superintendent of the National Observatory at Washington, is the author of a prominent series of geographies and wall maps. The history of the man is interesting in connection with the work accomplished. In early life a fall from a tree caused the injury which disqualified him for agricultural labor. It robbed Tennessee of a scientific farmer, but it gave the world a scientific geographer. He became an astronomer, geographer, and writer. As an officer of the navy he had exceptional opportunities for seeing the world. Cruising along



Whaleback Steel Barges, Great Lakes. (From "Tilden's Geography.")

prepare the pupil for this exceedingly interesting and profitable new field. Following this review is a general chapter on "Commerce and Commercial Highways." Money, consuls, the conditions of labor, the subject of transportation in general, ocean routes, inland waterways, railroads, the postal system, the telegraph, etc., are all attractively treated. Then follows a more detailed discussion of the industries of our own nation. This is opened by a survey of area, physical regions, natural resources, population, and occupations. Then are considered the raw products, their place, time, quantity, value, and relative importance; iron, coal, bread-stuffs, textile fabrics, lumber, etc., being prominently treated. Next come the location, extent, importance of the manufactures, and the value added to the raw products by a change of form.

This is followed by the great subject of "Transportation," under which are discussed our waterways, railroads, the extent and growth of our inland and foreign commerce, our great riverports, lakeports, and seaports, and our inland commercial centers. The foreign nations are treated in the order of the importance of their trade with us,—the method of treatment being similar to that of the U. S., as far as practicable.

The lines of the book are skillfully drawn together in the last chapter, which provides a general survey of the food products, textile fabrics, metals, and other mineral substances, manufactured articles, and miscellaneous products of all nations.

Liberal footnotes provide a large amount of general and statistical information, brought down to a recent date, and especially available for reference.

The "Grammar School Geography," being intended for use in grammar schools, is simpler, both in material and method, than the author's "Commercial Geography." Its purpose is to amplify and make useful the geographical teaching of the lower grades. It treats of the great topics directly related to the well-being of mankind. How men get a living, how, when, and by whom the things which they consume are raised, manufactured, and brought to their door from all over the world. It treats in a systematic and logical way those topics which have direct reference to the activities of life. This work is well adapted to follow any of the popular elementary geographies. The following is the table of contents:

Chapter I., Production and Exchange; Chapter II., Industries and Commerce; Historic Outline; Chapter III., The Great Commercial Staples; Chapter IV., The Great Commercial Sta-

the coast of South America he improved his opportunities by going ashore and seeing the people. He crossed the Pacific and entered Canton at a time when foreigners were denied admission, and in all his travels over the world, his close observation became a preparation for his final work, the Elementary, Physical, and Manual of Geography.

The characteristic points of Maury's geographies have been described in a complimentary manner by a Southern educator: "No geographer ever possessed in a more eminent degree the faculty of popularizing scientific truth than the late Commodore Maury. In clearness of presentation, perspicuity of style, and in the skill with which he exhibited the relations between cause and effect, he was unsurpassed by Huxley, Agassiz, or Tyndall. The superiority of his geographies lies in their grace of illustration, luminous exposition of scientific truth, and happy co-ordination of history with geography."

The Elementary Geography is designed for primary and intermediate classes, and forms an interesting introduction to the Manual. One-fourth of the book is directed towards the development of the pupil's conception of direction and distance; it presents ideas of the shape, size, and motions of the earth, forms of land and water, climate, and kindred topics. A description of countries follows, and furnishes a succession of vivid pictures of their most conspicuous features. The lessons are arranged in two parts: one for reading, the other for recitation. These are followed by questions and reviews. Map studies accompany the maps, at the same opening with the latter.

The Revised Manual of Geography is divided into four parts: First, the statement and the illustration of the principles of mathematical, physical, and political geography. Second, the description of countries. Third, map drawing. Fourth, geographical statistics and pronouncing vocabulary. Two general reviews are provided for, one after completing the study of the Western hemisphere, and another after the survey of the Eastern hemisphere. Recent geographical events are kept up to the time in a supplementary leaf that is rewritten at frequent intervals. The standard time system, which was generally adopted throughout the United States in 1883, is fully explained with special illustrations.

The Revised Physical Geography treats, in systematic order, of the physical features and phenomena of the earth—its lands, waters, atmosphere, and life. The arrangement of paragraphs is like the other books of the Maury series, in heavy face headings

The topical analyses, test questions, and review helps, will furnish suggestions of a practical character to the teacher and pupil. The series of Maury's wall maps comprises North America, The United States, The World, South America, Europe, Asia, Africa, Physical and Commercial Chart of the World.

Butler's Geographies.

(E. H. Butler & Co., Philadelphia.)

The publication of a series of geographies is not an easy undertaking. It involves not only the selection and management of a corps of writers, artists, engravers, proof-readers, and printers, but also the expenditure of large sums of money. The task is necessarily slow and laborious. Work of the best quality requires time, and skilled workmen cannot be hurried.

The selection of subjects for illustration is a matter of no little difficulty. In Butler's series most of the foreign views were obtained by the author during his travels abroad. Many of the home views were collected during a tour through the Western Highlands. A few were placed at the publishers' disposal by officers of the Geological Survey.

Some of the illustrations have interesting bits of history. That on p. 129, Complete Geography, is from a sketch made by Sergeant (now Lieutenant) Brainard while at the farthest point north ever reached by a human being. The recumbent figure is Lieutenant

Lockwood, who is taking observations with a sextant. Brainard stands with chronometer in hand calling time, while the Esquimaux, Frederik, is busying himself about the lunch of pemmican. The flag hanging from the tent was made by Mrs. Greely, and was designed to be carried to the farthest point north.

The illustration on p. 102, Elementary Geography, is from an instantaneous photograph of the eruption of Vesuvius. It was selected from a series of four made April 26, 1872, during the progress of the eruption. This particular view was selected because it shows so clearly the showers of corrosive rain which were condensed from the vast clouds of vapor ejected from the volcano.

The geographical quality of the illustrations is one of their most striking features. In nearly every instance they have been made from photographs of natural scenery. Every picture is an excellent object lesson, and each has been selected with a view to its teaching qualities. They are all striking, original, and beautiful pictures.

The relief maps constitute one of the most valuable features ever placed within the covers of a geography. There has long been a demand for a method of delineating topography. The hachure-lines which conventionally represent mountains on the ordinary maps give little or no idea of the surface of the country. There have been many attempts to overcome this defect. Maps have been cumbered with contour lines and supplemented by



Copyrighted, 1887. Used by Permission of the Publishers, E. H. BUTLER & CO., PHILADELPHIA.

RELIEF MAP OF THE UNITED STATES.
FROM BUTLER'S COMPLETE GEOGRAPHY.

profiles or "elevations." Such expedients are useful to the trained topographer and engineer, but they mean nothing to the child. A still better substitute is the so-called bird's-eye view, but this, even when well drawn and engraved, gives little satisfaction, for it is always without the desired stereoscopic effect, and if the rivers appear in white lines, the effect of relief is reversed; the valleys seem to be elevations, and the elevations valleys.

The relief maps in Butler's Geographies overcome these defects. They are photogravures of miniature continents sculptured and shaped in clay. These models were made by an officer of the United States Geological Survey who is admitted to be the most expert topographical modeler living. To appreciate the success of Mr. Mindeleff's work it is only necessary to see these maps. Concerning them Professor John Tyndall, in a letter to the author, says: "The stereoscopic effect which you have succeeded in producing is wonderful. These maps have given me a clearer conception of the earth's mountains and their relations to the continents whereon they appear than I had previously possessed."

Elementary and Grammar School Geographies.

(Rand, McNally Co., Chicago.)

The preface to the Elementary Geography issued by this house stated that it has been specially devised to meet the urgent demand for a text-book in which the topical method for teaching geography is used. The topics covered are many in number, and in addition to the usual treatment of the surface features and their influence on mankind, the air, water, temperature, material—both organic and inorganic,—the sources and uses of mechanical power, the environment and habits of man and his efforts to subdue nature, all receive a due share of attention.

The specimen page which we give from this volume shows the manner in which the lessons are presented, the style of type and illustration. The latter is supplemented by diagrams, colored maps and engravings, prepared expressly for this work. The relief maps deserve special remark for their distinctness.

The plan adopted in the Grammar School Geography in discussing a country is to give first, position, because location with

ALTITUDE.

35

LESSON 18.

Altitude.

Altitude, in geography, means height above the level of the sea. The clouds over the sea are at an altitude of from one to three miles generally. The tops of some of the highest mountains are at an altitude of four or five miles.



A VALLEY AMONG THE MOUNTAINS.

If we wish for colder weather we can always find it by going farther away from the equator. As we live in the Northern Hemisphere, going away from the equator would mean, to us, going toward the north pole, or going north. A thousand miles either north or south makes quite a difference in the degree of cold.

But there is another direction in which we might go, and find a very great difference in the degree of cold, within a distance of three or four miles. This is the upward direction. The higher we go above the sea level, the colder we find the air to be. No matter how hot it may be on the ground, it is cold up where the clouds are. In the hottest day of summer you would need your warmest clothes if you were to go up a high mountain or up in a balloon.

Whether we get up above sea level by following up a slope hundreds of miles long, or up a steep mountain, or up in a balloon, we find it is colder the higher we go. So there are two great causes which affect the degree of heat or cold in a country—**distance from the equator and altitude.**

At an equal distance from the equator, high land has a colder climate than low land, and in the hottest parts of the earth it is cold at the tops of high mountains. There are countries where the low valleys are very warm, and full of plant life, while up on the mountains, only four or five miles away, are snowdrifts that never melt. Even at the equa-



SNOW-CAPPED MOUNTAINS.

tor there are mountains which reach up so far above the sea level that their tops are always capped by snow. At the foot of one of these mountains grow oranges, figs, coffee, spices, and other **torrid zone** plants, and a little distance up are potatoes, wheat, and other **temperate zone** plants, while the top is as bare of plant life as is the **frigid zone**, and the snow lies many feet in depth. We judge the climate of a country mainly by two things: **Its distance from the equator, and its altitude**

Specimen Page from Rand, McNally's Elementary Geography.

reference to the Equator is largely indicative of temperature. Position with reference to air and water currents also affects temperature. Position is also important with regard to facilities for commerce.

Second, the surface, as temperature depends greatly upon altitude and rainfall.

Third, drainage, which is a result of position and surface, and dependent in character upon surface, and in amount upon rainfall.

Fourth, climate, which is a result from position, surface, and drainage as causes.

Fifth, industries and productions as they result from position, surface, drainage, and climate.

Sixth, commerce, the outgrowth and result of the foregoing.

Seventh, population and its condition, as dependent on the preceding topics.

The specimen page from the Elementary Geography which we give, shows the style of type and illustration, and manner of presenting the lessons. The pictures deserve praise for their clear, distinct outlines. Many of them have been photographed expressly for this work.

Books.

A useful book for all interested in the subject of geography bears the title of "Hints to Teachers and Students on the Choice of Geographical Books for Reference and Reading, with Classified Lists." It is prepared by Hugh Robert Mill, D. Sc., F. R. S. E., a well-known British geographer, whose reputation is sufficient to guarantee a work of unusual merit. The lists given include works principally of British and American authors, but there are some important ones in German, French, and other languages. The introductory chapters on the principles of geography, the teaching of geography, the choice of text-books, etc., are particularly valuable, as giving an idea of the object and scope of the study; these are followed by helpful chapters on atlases and means of illustration, works of reference, mathematical and physical geography, bio-geography and anthropo-geography. Then the different countries are taken up and lists given for each, preceded by short introductions. This volume will be a safe guide in the wilderness of books on this important subject. (Longmans, Green & Co., New York. \$1.25.)

We have been accustomed to associate the name of F. Max Müller with learned philological works, of great value to the world but limited in their circulation mainly to scholars. But we were aware that the famous philologist was a man of great versatility, and it is therefore with less surprise, but with no less delight, that we peruse the pages of his recollections, to which he has given the title of "Auld Lang Syne." These recollections extend over considerably more than a half century, during which the author has met most of the prominent people in literary, musical, and political life. He says he can vouch for the truth of the book, "so far as it is an exact copy of the negative developed by long exposure in his memory." His musical reminiscences include those of Mendelssohn, Liszt, Schumann, Jenny Lind, and others. He was acquainted with many of the German literary celebrities before he went to England, and after that knew Kingsley, Clough, Matthew Arnold, Tennyson, Browning, Froude, Ruskin, Carlyle, Emerson, Lowell, Holmes, Macaulay, Grote, Huxley, and many others. Many members of the royal family were among his acquaintances. The reminiscences of people are interspersed with criticisms of their work. The bright, discursive style and the interesting matter make it one of the most delightful books we have lately seen. The frontispiece is a portrait of the author. (Charles Scribner's Sons, New York. \$2.00.)

So long as an author on a well-worn subject can show that he has presented it in some new light, there is a call for his book, and it will be welcomed by those who are seeking knowledge. This we think Henry Coppée, LL.D., of Lehigh university has shown in his manual of instruction in English Literature. His object has been "to present prominently the historic connections and teachings of English literature; to place great authors in immediate relations with great events of history; and thus to propose an important principle to students in all their reading." It will be found that history and literature are thus reciprocal; they combine to make eras. The author has not only considered the great authors, but has given a connected view of English literature; he has shown students how and what to read for themselves. This last is more desirable than any acquaintance, however intimate, with facts. Dr. Coppée's book will be much sought for, both for reading and study. (George W. Jacobs & Co., Philadelphia.)

Aesop and Mother Goose have an undying interest for children, and are properly used to train the ear to rhythm and to inculcate moral lessons. Selections from them are made for a volume of the Lakeside Literature Series, which is entitled "Fables and Rhymes." The aim in preparing the book has been to select the fables which are of the greatest interest and contain the best moral; to avoid descending, in the language, to silliness on the one hand, or rising, on the other, above the comprehension of childhood. The book is beautifully printed and illustrated. (Western Publishing House, Chicago. 30 cents.)

Two books of a religious nature, containing much in small space, will find a wide range of readers. They are "The Message of the World's Religions" and "Aids to Devout Life." The essays comprising these volumes were printed originally in "The Outlook." (Longmans, Green & Co., New York. 50 cents each.)

"A Manual of Suggestions in Form, Drawing, and Color," by Elisa A. Sargent, has just been issued, as a basis of the regents' examination in form, study, and drawing for the first- and second-year academic certificate, and the examinations in form, drawing, and color; for training class, third, second, and first grade, and special drawing certificates. It is based upon the official documents of the board of regents and the department of public instruction. (Published by the Prang Educational Company.)

There are new dictionaries to-day of various degrees of merit. Webster still holds its own distinctive place, combining accuracy, fullness, clearness, convenience, and authority. It ranks as high in foreign countries as here in America. The tourist sees it the familiar standard in the mother country, and in all her colonies, and in Australia it is making a rapidly-growing sale.

No more remarkable debate ever took place in Congress than that between Webster and Hayne. The speeches should be studied by every school boy, for the noble expressions of patriotism it called forth. They are published in numbers 121 and 122, a cloth-bound volume of the Riverside Literature Series. The book contains a reproduction of the celebrated painting of the scene in the United States senate while Webster was replying to Hayne. (Houghton, Mifflin & Co., Boston. 40 cents.)

"First Facts and Sentences in French" is one of a series of text-books in that language by Victor Bétis and Howard Swan. This book is to be used in teaching the current idiomatic French phraseology of ordinary life to young pupils. Each subject is treated as a whole without going into extended detail, and each lesson is complete on a single page. In the one hundred and twenty lessons are given a great variety of subjects, comprising those which most often present themselves in ordinary life. The most useful lessons in grammar are taught intimately connected with the lesson itself. Short dialogues are given, which lead the pupils, little by little, to the reading of ordinary French books. (Charles Scribner's Sons, New York. 65 cents, net.)

In no historical play has Shakespeare exhibited greater power to show life and action than in "Julius Caesar." Its thorough study is therefore important. Prof. L. A. Sherman's (University of Nebraska) book on "Analytic Questions on Shakespeare's 'Julius Caesar,'" goes over the play scene by scene, stimulating the student to thought and inquiry. The plan is that used by the author in his own classes. (J. H. Miller, Lincoln.)

The little books of the Standard Literature Series have been in circulation long enough for teachers to become thoroughly impressed with their remarkable merits. They give whole works, or condensations, where they are lengthy, with introductions and notes. The best literature is chosen for this purpose. The latest numbers are as follows: Double number 27, Cooper's "The Water Witch"; number 28, Scott's "Tales of a Grandfather," and number 29, Cooper's "The Last of the Mohicans." (University Publishing Co., New York.)

The priced catalogue of artists' materials issued by F. W. Devoe & C. T. Reynolds Co., Fulton and William streets, New York, is the size of our monthly magazines, and handsomely bound in yellow cloth. This firm, established in 1755, supplies material for oil painting, pastel, sketching, crayon drawing, gilding, interior decoration, tapestry painting, water color painting, draughting, designing, etching, and other work of illustrators, architects, and teachers of manual training.

The leather bound catalogue of Frost & Adams Co., 37 Cornhill, Boston, is a permanent possession for anyone interested in artists' materials, draughting materials, tracing cloth, and mathematical instruments. Two hundred pages are covered with information and illustrations pertaining to these subjects, and interleaved with blank pages for adding memoranda.

Catalogues Received.

Physical Apparatus
Crayons
Gymnastic Apparatus
School Furniture
School Apparatus
New Photographs

Queen & Co.
Franklin Crayon Co.
A. G. Spaulding
Richmond Sch. Furn. Co.
J. B. Colt & Co.
Berlin Photographic Co.

Philadelphia
Rochester, N. Y.
New York
Richmond, Ind.
New York City
New York

New Publications of the Month.

This list is limited to the books that have been published during the preceding month. The publishers of these books will send descriptive circulars free on request, or any book prepaid at prices named. Special attention is given to all such requests which mention THE SCHOOL JOURNAL. For Pedagogical Books, Teachers' Aids, School Library, and other publications, see other numbers of THE JOURNAL.

TEXT-BOOKS.

TITLE.	AUTHOR.	PP.	BINDING.	PRICE.	PUBLISHER.
Songs of Happy Life	Eddy, Sarah J.		Ida.	.30	Art and Nature Study Pub. Co.
French Method	Berger, F.				Berger, F.
Steps in Phonetic System	Cullen, Annie E.			.50	Cope, Clark & Co.
Elementary Botany	Kellerman, W. A.			.40	Eldridge & Bro.
September to June with Nature	Warren, M. L.	100	Paper	.35	Heath & Co., D. C.
Tables of German Grammar	Wischer, A. A.	486	Cloth		Holt & Co., Henry.
English Literature	Coppee, Henry				Jacobs & Co., George W.
Book About Shakespeare	M'Ilwraith, J. N.			.80	Nelson & Son, Thos.
Norwegian Grammar and Reader	Olson, Julius E.				Scott, Foreman & Co.
Horace Mann	Hinsdale, B. A.	326	Cloth	1.00	Chas. Scribner's Sons.
Outlines of Descriptive Psychology	Ladd, Geo. Trumbull	428		1.50	
Stepping Stones to Literature	Arnold, Sarah Louise			.50	Silver, Burdett & Co.
Common School Literature	Westlake, J. Willis				Sower Co., Christopher.
Popular Synonyms		91	Paper		Burrows Bros. Co.
Elements of Geometry	Hull, Geo. W.	398	Cloth		Butler & Co., E. H.
Educational Music Course, Fifth Reader	Mason, Luther Whiting	298	B'ds		Ginn & Co.
" " " " Sixth " "					
German Grammatical Drill	Schrakamp, Joseph	168	Cloth	.85	Holt & Co., Henry.
Exercises in Conversational German		107	"	.55	
Birds of Village and Field	Merriam, Florence A.	406	"	2.00	Houghton, Mifflin & Co.
English Grammar	Earle, John	277	"	1.25	Putnam's Sons, G. P.

LIBRARY AND MISCELLANEOUS BOOKS.

TITLE.	AUTHOR.	PP.	BINDING.	PRICE.	PUBLISHER.
Crusoe's Island	Ober, Fred. A.	277	Cloth	.65	Appleton & Co., D.
A Christmas Accident	Trumbull, Anna Eliot				Barnes & Co., A. S.
S. Y. Charities Directory	Charity Organization Society				Charity Organization Society
Free Banking a Natural Right	Dilworth, James A. B.			1.00	Continental Pub. Co.
The New Puritanism	Berry, A. B.			1.25	Fords, Howard & Hulbert.
The King of the Town	Mackubin, Ellen	752	Cloth	1.00	Houghton, Mifflin & Co.
Three Heroines of New England Romance	Rhafford, Harriet				Little, Brown & Co.
Shrewsbury	Weyman, J. Stanley	410	Cloth	1.50	Longmans, Green & Co.
The Princess	Tennyson				Maynard, Merrill & Co.
The Brown Laurel Marriage	Ayr, Landis				Neely, F. Tennyson
An Innocent Cheat	Le Leon, S. C.				" "
Even as You and I	Hall, Bolton	270	Cloth	"	" "
Her Fortune Her Misfortune	Baugh, Mary E.	298	Paper	"	" "
Language of the Hand	Cheiro	160	Cloth	"	" "
In the Tolls	Ring, Thomas	371	Paper	"	" "
American Finance	Noyes, Alex. Dana	277		1.25	Putnam's Sons, G. P.
Modern France	Lebon, Andre	488	Cloth	1.50	" "
Horace Mann	Hinsdale, B. A.	326	"	1.00	Scribner's Sons, Chas.
Simon Dale	Hope, Anthony	367	"	1.50	Stokes Co., F. A.
For Love of Country	Brady, Cyrus Townsend	354	"	1.25	Scribner's Sons, Chas.
And Lang Syne	Muller, F. Max	325	"	2.00	" "
Twenty Years Before the Mast.	Erskine, Chas.	311	"	1.00	Jacobs & Co., George W.
Old Farm Fairies	McCook, Henry Christopher	432	"	1.50	" "
Treasury of American Verse	Larned, Walter	367	"	1.25	Stokes Co., F. A.
Andree's Balloon Expedition	Lachambre, Henri	306	"	1.50	" "
Tales of a Grandfather	Scott, Sir Walter	110	Paper	.12	University Pub. Co.
The Water Witch	Cooper, J. Fenimore	206	"	.20	" "

Books Under Way.

(Under this head will appear advance announcements of forthcoming text-books.)

D. Appleton & Co.

Troeger's Harold's Rambles.
Vincent's Animal World.
Parker's Playtime and Seedtime.
" On the Farm.
Keyser News from the Birds.

Werner School Book Company.

Werner Arithmetic, Book III. By Prof. Frank H. Hall.
DeGarmo & Brown's Grammar. By Charles DeGarmo and George P. Brown.
Robinson Crusoe. By Dr. Charles DeGarmo.
History and Civil Government of Louisiana. By John R. Ficklin.
Story of Patrick Henry. By Alma Holman Burton.
Story of Alexander Hamilton. By Alma Holman Burton.
Story of Andrew Jackson. " " "
Story of U. S. Grant. " " "

Leach, Shewell & Co.

The Prisoner of Chillon and Other Selections from Byron.
Selections from Dryden, Wordsworth, Burns, and Browning.

Thompson, Brown & Co.

Graded Lessons in Arithmetic, Grade IV., by Wilbur F. Nichols, principal of grammar school, Holyoke, Mass.
" Right Living," a text-book in ethics, by Susan H. Wixon.

The Macmillan Co.

Greek and Latin History Topics, by A. L. Goodrich, principal of Utica academy, Utica, N. Y.
Studies in American Literature, by Professor Rev. C. O. Noble, Iowa college, Grinnell, Ia.
Nicholson's Trigonometry, by Prof. J. W. Nicholson, State University, Baton Rouge, La.
Entomology, by Prof. A. S. Packard, Brown university.
Classical Tales of Many Lands, by Miss Bertha Palmer, of the Brearley school, New York city.
Nature Reader, by Mrs. L. L. W. Wilson, Normal school, Philadelphia, Pa.

University Publishing Co.

STANDARD LITERATURE SERIES.

Pilgrims Progress (condensed) (single) paper, 12½ cents, cloth, 20 cents, with notes and introduction by Edward Everett Hale, Jr., Ph. D., professor of rhetoric, Union college.
Black Beauty, by Anna Sewall. Edited by Dr. Edward R. Shaw, department of pedagogy New York university (single number).

The Yemassee, by William Gilmore Simms (single) with notes, introduction, and map.

David McKay.

Goethe's Faust.
Goethe's Herman and Dorothea.
Schiller's Maria Stuart.
Schiller's William Tell.

E. H. Butler & Co.

Hull's Elements of Geometry.

D. C. Heath & Co.

Spelling Blank to Accompany the Natural System of Vertical Writing, by A. F. Newlands and R. K. Row.
The Essentials of Argumentation, by Prof. E. J. MacEwan.
A Supplement to the Advanced Arithmetic in the California State Series, by Dr. A. W. Plummer, principal of Olive street school, Los Angeles, Cal.
Coriolanus in the Arden Shakespeare Series. Edited by Edmund K. Chambers, of Oxford, editor of Hamlet, Midsummer Night's Dream, etc.
Jensen's Die braune-Erica. Re-edited by Prof. E. S. Joynes, of South Carolina college, and entirely reset.

Houghton, Mifflin & Co.

RIVERSIDE LITERATURE SERIES.

No. 121. The Great Debate between Hayne and Webster: Hayne's Speech, with introductions, notes, and illustrations. Paper, 15 cents, net.
No. 122. The Great Debate between Hayne and Webster: Webster's Reply, with introduction, notes, and illustrations. Paper, 15 cents, net.
Nos. 121 and 122 also bound together in one volume, linen, 40 cents, net.
These two numbers are edited by Lindsay Swift, of the Boston Public library.
113. Democracy. On a Certain Condescension in Foreigners, and The Study of Modern Languages, by James Russell Lowell, with notes. Paper, 15 cents, net.
No. 123 also bound together with No. 39 (Lowell's Books and Libraries, and Other Papers in linen 40 cents, net.
Birds of Village and Field, a bird book for beginners, adapted for school use, by Florence A. Merriam.
The Children of the Future, by Nora A. Smith, author (with Mrs. Wiggan) of "The Republic of Childhood," "The Story Hour," etc. 1 vol. 16mo, \$1.00.

Ginn & Co.

New Century Speaker, by Prof. Henry A. Friok.
The Story Teller's Art, by Charity Dye.
Macbeth, edited by Hudson: Standard English Classic Series.
Harvard Studies, VIII.
Mason School Music Course, Book I. by McConathy and Butterfield.
Caesar, Book I, edited by Arthur W. Roberts.
Pope's Iliad, edited by William Tappan.
German Composition, by Wilhelm Bernhardt.
The Captivi and Trinumus of Plautus, edited by Prof. E. P. Morris.

The School Journal.

NEW YORK & CHICAGO.

WEEK ENDING MARCH 5, 1898.

It happens very frequently that boards of education underestimate the amount of money necessary to carry on a year's work. Sometimes, in addition to this, boards of apportionment are unwilling to let the budget pass uncut, proceeding on the mistaken view that it is their business to reduce expenses, lest the taxpayers might surmise that they were not doing their duty. The usual result is, that before the end of the year the appropriation for school purposes is consumed. What ought to be done under these circumstances is to take up a loan, and then add the amount of the deficit to the succeeding budget, explaining to the people the reason for the increase. Minneapolis, for instance, has suffered for several years because of an unwise financial policy, so that this year something desperate had to be done to clear the ground for a sounder foundation for the next and succeeding years; the schools will be closed in May. How much loss this will mean to the children of such a city, every friend of education will be able to picture out for himself. But the teachers' interest should also be considered. What of their salaries?

Speaking of teachers' salaries, we are reminded of the sad state of affairs in several cities of this country. *The School Journal* has heard of at least four large cities where the pay of teachers has been held back. In one place the comptroller announces that there is no money in the treasury for work performed by teachers some months ago. Another comes forward with the excuse that a few mistakes in the pay-rolls are responsible for delay. A third and fourth say that the educational budget has been overdrawn. It seems ridiculous to expect teachers to be the sufferers for the avarice of their superiors. Their contracts entitle them to prompt payment. If, for some reason or other, the employer is short of cash, he ought to send an apology to his employees, and promise to pay the legal rate of interest. There should be no occasion for this reminder to municipalities. Of their business methods, above all others, thorough honesty might be expected.

The negligence of such communities in the payment of teachers has given rise to a vicious scalper system. Salaries are small, as a rule, and if they are not promptly paid, great inconvenience is caused to teachers. In Brooklyn, for instance, it is said that teachers living a long distance from school have been compelled to walk, not having money to pay their car fare; at least one has been sent from her boarding place, because she could not pay her bill, etc. Is it any wonder that, under such circumstances, teachers should accept the Judas propositions of people who make it a business to advance money on legal claims on the city treasuries at usurer's rates of interest? To think that such a scalping system can exist and grow, principally because teachers' salaries are not promptly paid! Why, it is outrageous, and a blot on our system of municipal economy.

It is quite customary for the publishers of text-books to send samples of the books they publish to all teacher who ask for them. The question was lately asked of an observant publisher whether this practice paid

well for both parties, and he was very emphatic on the negative side: "But we cannot help it, except by the united action of quite a number of publishers. You see, each one of us has friends among the teachers; we must have them; we think we hold them by sending them books when they ask for them; but I believe it would be far better to have a price for teachers, say at 25 per cent. discount, and not give away a single book."

Another publisher was asked the same question, and he gave the same reply: "We send the books they ask for, but ask them to return them if they do not expect to use them in the school."

There is no such custom in England, and probably not in Germany or France; it is indigenous to America; and it would be better if it were abolished. There are many reasons why the text-book should not be furnished free to the teachers; no lawyer, doctor, or clergyman gets books free; the teacher does not need many text-books, and is able to buy them.

The present is the special monthly of *The School Journal*. A large amount of material is offered that is of practical interest to school officers generally. A paper on the "Ventilation of School-houses," by Dr. A. P. Marble, of New York city, was intended for this week, but was crowded out for lack of space. This, together with the reports of the meeting of Department of Superintendence of the N. E. A., and of the International Kindergarten Union, will appear next week. By mistake, an announcement was printed that these would be found in the present number.

The Department of School Law and Recent Legal Decisions will be found on page 280.

Editorial Letter.

FLORIDA.

With reluctance I decided to forego attendance at the meeting of the school superintendents at Chattanooga, and to make my annual pilgrimage to Florida instead. It had been rainy Saturday and Sunday, Feb. 19 and 20, betokening a severe storm passing over the middle and upper part of New York state; the public mind was ill at ease over the terrible disaster to the steamship *Maine* in the harbor of Havana; there were many prophecies that the present condition of peace would be followed by one of war.

The Florida Special of the Southern R.R., was taken at noon; at 6 P. M., we reached Washington and shot off towards the foot hills of the Blue Ridge; darkness descended on the train, but abundant light came from the Pintsch gas; a dining car attended the train until nine o'clock; then, as all had betaken themselves to their berths it was switched off. The sleeping arrangements on a Pullman car are as good as they can be, undoubtedly, but one cannot feel that he has the air and room a human being should have while he sleeps, and his prayers ascend less gratefully than usual.

In the very early morning we pass Rock Hill, S. C., and see the normal school on an eminence, one of the good things done by Senator Tillman, when governor, and about the only one I can remember, though I think there are some good points in his "dispensary law." We reach Columbia and hasten on to Savannah, then to Jacksonville at 1:30 P. M., having paused in but five cities about five minutes each. As we left Jersey City about 12:30 the journey took 26 hours, since our arriving is by Central time; a journey wonderful for comfort and quickness.

I met on the train a lawyer of eminence in Boston who declared our moral condition to be anything but creditable or promising of safety. The lynching of 800 negroes in the South has begun to be fol-

lowed by lynching of white men at the North; we have become so accustomed to suicide that we no longer are startled by it. Men with crude, dangerous, or undermining notions, often wholly venal, succeed in being elected to office. The clergy are no longer the leaders; they are in the swim with the rest.

Are these statements really true? *The Journal* has often called attention to the downward tendency evidenced by the homicides, which reach the appalling number of over 7,000 per year; and the rapidly increasing number of suicides. In listening to this eloquent lawyer, descended from one of New England's famous families, I could but wish his words might reach the ears of leading teachers, for the schools have got to undertake the task of putting more morality into the next generation. I have surmised that possibly some *Journal* readers have concluded the editor was given to croaking. When the ugly facts are considered, the conclusion that the country is on the road to a moral collapse seems inevitable.

His reference to clergymen reminded me that in a gathering lately there were three of this class with their wives, and that each of the latter wore diamonds, one quite liberally decorated. The easiest explanation I could make of this was that diamonds had become cheap; but my traveling companion put it to a desire to be in the swim with the wicked world. Who is right?

Jacksonville has become quite a handsome city in some parts; the weather is like our late May or early June. I sit on the piazza while writing and note the temperature is 68 degrees at 3 P. M. There are many on bicycles, for numerous streets are smoothly paved with bricks; it will be remembered that no stones are to be found in Florida.

The colored people here take to bicycles as naturally as do the whites. The appearance of the negro in all kinds of work provokes thought in the new comer to the South; the sidewalk below is being relaid, a roof yonder is being retinned; ships are loading with lumber; various kinds of materials are being moved about the streets such as ice, groceries, bricks and furniture—all this is done by the negro. All the laborers except the clerks and bookkeepers are negroes.

A curious fact was given by a gentleman who got on the train at Columbia: A negro opened a store, but after trying the experiment gave it up, saying: "They (the black) will buy of me if I will sell on credit; if they have got to pay cash they take it to the white man. When they have accounts to pay they always pay the white man first."

They used to discuss "the problem of the negro" here, but there is no problem about it, he is here and here to stay; he is doing well, he is laying up money, he goes to church; in fact about the best church here, will, when completed, be owned by the negroes; he is being educated, and, above all, is slowly learning to be an independent, thrifty, moral, and intelligent citizen. I say slowly, for he has a lot of poor teachers in the white race, a race only partially civilized, no matter if it does use electric lights and the telephone.

Florida is the Winter sanitarium of the United States. Up to about fifteen years ago the main visitors were consumptives; it was then poorly provided with suitable homes, and much misery was experienced by invalids. It had been found that oranges of a superior quality could be raised, and their culture was undertaken quite extensively; many had orange groves that yielded fine incomes. In 1885 a disastrous freeze occurred, but this did not abate the belief that Florida's future was the production of citrus fruits. Another freeze occurred in 1895, and so severe that most of the orange trees were killed. These disasters have compelled the residents to return to the original destination enjoyed by Florida—that of being a winter sanitarium for the other states.

There are probably 100,000 persons in the northern belt of states that need a warmer climate in winter—a very large number of these need it all the year round; that is, they are constituted to live in a climate such as Florida has.

If this were known they would undoubtedly come here, but no literature is diffused bearing on this point. There is a vague impression that the cost of living is very high, or that it is malarious, or very hot in summer. All of these are untrue; houses in the country can be purchased cheap, and if one performs his own gardening, living is probably the cheapest here; it is a new country and covered with trees, and in such a country there will be places where malaria exists. The summers are long, beginning in May and lasting into October; it is the long and steady temperature that is oppressive and not the high degree.

I am not writing the above to boom Florida, I hope only to benefit some one who needs the climate that prevails here. There are various "complaints" that cannot be reached by drugs, but can be cured by climate.

As many of the readers of *The Journal* know, I was a sufferer from nervous prostration, as it is termed; in my case the chief feature was an inability to sleep. I came here and sat in the sun daily, on the south side of the hotel in January, February, and March; the days are cloudless here in winter, it will be remembered. Pursuing this course I improved—was gradually restored to health. During my visits I have become acquainted with a great number of persons who came out here, out of health, and have regained it.

I therefore believe the chief function of Florida is that of ministering to the health of America; the capacity of its soil and skies to produce oranges, pineapples, and strawberries is secondary, valuable as it may be.

Jacksonville.

A. M. K.

Important Educational Meetings.

March 16-17.—Eighth Annual Convention of City and Borough Superintendents of Pennsylvania in the North School Building at Pittsburgh.

March 24-26.—Southern Indiana Teachers' Association, at Terre Haute.

March 31, April 3.—Southwestern Iowa Teachers' Association, at Fort Madison.

April 1-2.—North Central Association of Colleges and Secondary Schools, at Auditorium hotel, Chicago, Ill. Frederick L. Bliss, secretary, Detroit, Mich.

April 12-14.—Ontario Educational Association, at Toronto, Canada. Robert Doan, secretary.

April 22-23.—Northwestern Iowa Teachers' Association, at Sioux City. Supt. H. E. Kratz, Sioux City, president.

April 22-23.—Second District Educational Association, at Hopkinsville, Ky., Livingstone McCartney, superintendent.

Trans-Mississippi Educational Convention at Omaha, Neb., in June.

June 29—July 1.—Ohio State Teachers' Association, at Put-in-Bay.

July 5-8.—American Institute of Instruction at North Conway, N. H. George E. Church, Providence, R. I., President.

July 7-12, 1898. Meeting of the National Educational Association, at Washington, D. C., Supt. James Greenwood Kansas City, Mo., President; Irwin Shepard; Winona, Minn., Secretary.

The midwinter meeting of the State Art Teachers' Association will be held in Brooklyn, March 25 and 26, at the rooms of the association, Montague street. The Brooklyn Institute of Arts and Sciences will exhibit works of art suitable for school decoration, and the association will discuss the subject of "Works of Art in the Public Schools and Classrooms."

The meeting of the Southeastern Iowa Teachers Association will be held at Fort Madison, March 31 to April 3. This is expected to be one of the largest and most profitable meetings ever held by this section of the state association. City Supt. Cruikshank and County Supt. Stewart have provided accommodations for about 700 teachers, and, in addition, special programs for the entertainment of visiting teachers are being arranged, the nature of which have not yet been made public.

Ventilation and Sanitation.

Niagara Falls.—A committee of the board of education of this city recently made a trip to the schools of Elmira, Amsterdam, and Yonkers, to inspect their systems of ventilation and sanitation, before recommending a system for the new schools of this city. In Amsterdam, the committee inspected the Fuller & Warren system of heating and ventilating, and the Hyde system of flushing closets. In Elmira, they saw the use of both kinds of Northcott heating and ventilating apparatus, and in Yonkers, the Smead system of flushing closets, and the fan system of ventilation.

The report of the committee was, that the Fuller & Warren system should be used, and that a fan, operated by a water motor, should be placed in one of the proposed new buildings. In the estimation of the committee, the fan system is superior to the gravity system. They also recommended that the Northcott, or Meyers-Sniffen, system of flushing closets be used, in preference to any others they had seen.

English Copyright Law.

A bill has been introduced in the House of Lords, making an authorized translation an infringement of a copyright, and extending the copyright to lectures and sermons, with power to forbid newspaper reports of them. The bill also provides that magazine authors are the owners of the copyright of their articles after three years. Novelists are also protected from dramatization. The bill will undoubtedly become a law.

A Perpetual Light.

S. B. Nickum, of Logansport, Ind., has invented a light which, he claims, will burn forever, without diminution of power of brilliancy. There is no outside generator, and no connecting wires to the light. It may be carried about in the hand like an ordinary lamp. The light is in two forms—one, a mellow, phosphorescent glow, the other, a ball of flame. It is contained in a globe of clear glass, and emits no heat. The principle is similar to that in the carbon filament of an incandescent lamp—the power is constant, but, as the matter on which the power acts is reduced, the brilliancy is greater. When the desired candle power is reached, the globe is sealed, and thereafter no change can take place. Breaking the globe extinguishes the light instantly. Mr. Nickum claims that Newton's theory of atoms being drawn together by an attractive force, is wrong, and that his light is based on the theory that atoms are pushed, and not drawn, together. The light is to be made at comparatively small expense.

Shaping Marble by Pressure.

At the McGill university some interesting experiments are being made, which tend to show that such a hard and brittle substance as marble may be changed in form by pressure. Small columns of pure Carrara marble have been placed in sheaths of iron, and graduated but long-continued pressure exerted on them, with the result that the marble bulges so as to swell the iron sheath. After cutting away the iron, the marble remains as hard and brittle as before, but much altered in shape.

School Savings Banks.

That the pupils of many of our public schools are being taught industry and frugality, as well as the value of money, is shown by the fact that during the past few years the pupils of 280 schools have deposited in their school savings banks \$451,211, and that there is at present due depositors, the sum of \$158,197.

The Bible in the Public Schools.

Richmond, Ind.—Supervisor W. S. Hiser, of this city, strongly advises the use of the revised version of the Bible in the schools. Prof. Hiser has collected opinions from seventy-five prominent theologians who prefer the revised to the authorized version. The claims in its favor are its arrangement, the paragraphing, the prose and poetry, the more accurate translation, marginal readings, and other devices which make the new version more easily understood by the child.

The Stereopticon in New York State.

In 1895 a law was passed (chapter 362) to "provide that additional facilities for free instruction in natural history, geography, and kindred subjects, by means of pictorial representation and lectures," be furnished in each city and village that has a superintendent. The law reads as follows: "The state superintendent of public instruction is hereby authorized to furnish additional facilities for instruction in natural history, geography, and kindred subjects, by means of pictorial representation and lectures, to the free common schools of each city and village of the state that has, or may have, a superintendent of free common schools. The local school authorities may, in their discretion, cause the aforesaid illustrated lectures to be repeated to their artisans, mechanics, and other citizens on the legal holidays and at other times. Any institution instructing a teachers' training class, or any union free school, may have the free use of the apparatus provided by this act, upon the payment to the superintendent of schools loaning

the same, of necessary expenses incurred in such use, or for any loss or injury to said property. The sum of twenty-five thousand dollars is hereby appropriated for the support and maintenance of said instruction for the term of four years.

Notes on Regents' Report for 1897.

The 111th annual report of the secretary of the university just issued contains 190 pages, twenty-four of which are compact statistics, showing how the regents used their money. These expenditures are given in parallel columns for the last five years, making plain every increase or decrease. The ordinary reader can learn, by a glance, about all moneys expended by the state in the interests of higher education; e. g., \$37,529.45 of the expenses of the year were paid by fees collected by the regents.

Some idea of the vast correspondence necessary in the various departments is given in the record of 115,094 pieces of mail sent out, or an average, including vacation season, of 383 pieces a day, not counting 7,507 express packages. Another item significant of the work done through printed matter is found in a detailed table of the university printing of the past six years. In 1897 the university issued 897 different publications in a total of 2,652,081 copies. Of these, 82 were books and bulletins, 540 were circulars, and 274, blanks, exclusive of stationery.

In the comparative university table, Columbia leads, with 289 teachers, 1,921 students, and a net property of \$17,905,277. Cornell is a close second, followed by New York and Syracuse universities. In the colleges and professional and technical schools, detailed tables show that, contrary to general opinion, money from private sources is spent more liberally than that of tax-payers. These higher institutions in seven years have increased their expenditures from \$2,733,860 to \$5,771,325; the value of buildings and grounds from \$15,129,028 to \$28,447,974; library and apparatus from \$1,896,959 to \$3,542,456, and the total property owned, from \$39,045,604 to \$77,148,944. The number of institutions has increased in five years from 81 to 101, the students from 22,062 to 28,007, and the graduates receiving first degrees, from 2,305 to 2,728.

Study of the tables will be useful to those who feared that the rapidly-raised professional standards of New York would deplete her schools. During three years, the medical students have steadily increased from 3,420 to 4,025, a gain of 605, or 150 during the last year alone. In law, the gain has been from 1,486 to 2,041. The educators who have worked for these standards may comfort themselves with these figures, which show that those whose concern for education is measured by their receipts from tuition have not suffered in their pockets, while the state has greatly benefited in the improvements secured.

Five years ago one-quarter of the academic students were in private schools. In 1897 the number had fallen to one-sixth. The number of boys in high schools rose to 19,504, a gain of 63%, and of girls to 24,322, again of 49%. The increase in the number of boys remaining in the high schools has been for the period in which the state has exacted a preliminary high school education before students can take the courses and degrees of the professional schools, and receive licenses to practice in New York. New York has in her high schools and academies 53,464 students, or one-eleventh of the whole number in the United States. In these figures New York is credited only with the students in its registered high schools and incorporated academies. In other states the figures include returns from great numbers of mere private schools, no other state having the New York system of sworn reports and state supervision of higher education. Of the 4,974 high schools in the country, New York has more than one-twelfth, and, most significant of all, in the growth for one year of 262 high schools for the entire country, one-fifth was in New York. That this growth was needed is shown by the fact that this gives only one to every 10,000 of population, while Ohio has a high school to every 8,000.

In the apportionment of state money, the report shows a growth of 1000% since 1882 in money expended for books and apparatus. In that granted for attendance, the growth is trifling. In other words, state money is, in late years, more and more distributed to communities which raise an equal amount from local sources for the same purpose, and experience amply proves that much better results are secured in this way.

The report has a large county map of the state, showing the location of all the institutions of higher education, including public libraries.

There are summaries of the statistics of the year regarding legislation, incorporation, university institutions, and inspection. Summaries are given of the important higher educational meetings of the year, including university convocation, the meetings of the associated academic principals, and of the colleges and preparatory schools of the Middle states and Maryland.

In the topics receiving special discussion, will be found the "growth of universities," with the reasons why we are likely to see institutions with from 10,000 to 20,000 students within another generation; the "simplification of annual reports," the "need of higher business education," and "state aid to high schools and academies."

Lack of Schools in Indian Territory.

Secretary of the Interior Bliss has sent a letter to Congress concerning the astonishing condition of public education in the Indian territory, in which he says:

"Of the two hundred and fifty or three hundred thousand white residents in the Indian territory, there are believed to be no less than thirty thousand children of school age, all of whom are shut out from the schools supported by the governments of the five nations of Indians who control the territory, as well as from those supported by the United States, for the benefit of Indian youth. Besides these, the children of the entire colored population, said to number twenty-five thousand, are little, if any, better off. In the Chickasaw nation, they are disowned, and cast off by the tribal government. The other nations have nominally admitted their colored population to citizenship, but, practically, their children are not better provided for than those of the whites. It appears, therefore, that there is a mass of more than fifty thousand children of both races of school age, for whose education, either industrial or literary, there is absolutely no provision whatever—children who are growing up without any of the advantages possessed by those in all other parts of the vast domain of the United States."

Accompanying the letter is one from Dr. Harris, in which he sums up the conditions as follows:

- (1) "That it seems to be a matter of sufficient importance to commend itself to Congress for immediate action.
- (2) "That provision that should be made in the form of industrial schools ought to lay some stress on the elementary English branches; and
- (3) "That the administration of the fund appropriated for the purpose should be placed with the Indian bureau, which already has charge of schools in that section of the country."

American Boys' League.

Denver, Col.—The American Boys' League, is a new organization combining features of the Chautauqua circles with those of Young People's societies. Its work, except in the philanthropic department, is confined to boys between the ages of 12 and 21 years. These may become members by signing the following pledge: Believing that the use of tobacco and intoxicating drinks and indulgence in profanity, gambling in any form, and licentiousness (including all impure acts, thoughts and language) are all hindrances to my success in life, as well as sins against my Creator, I do, of my own free will, declare that I will constantly try to keep entirely free from all these habits.

And, further, it shall be my constant effort to secure a better education, to save a part of my earnings, to keep entirely free from debt, to preserve my health and strength, to be always manly and honorable, to maintain our country's honor and integrity, to uplift the lowly and to teach others these principles.

And fully believing that whatever my surroundings may be, I may still, by my own efforts, improve my condition, I take for my constant and life-long inspiration the motto, "Self-Help."

It is the purpose of the league to build a great publishing house at Denver, Colo., the national headquarters, and to issue at a low price, graded series of lessons amplifying the pledge, and to make this and similar literature crowd out the trashy reading, which is so common.

The philanthropic department is very broad, and promises much for the good of neglected boys. It includes thorough organization in every community and a systematic effort to reclaim wandering youths. The Brightside School for Boys, at Denver, has come under the supervision of the National league, and will be made a great educational community of national scope for the thorough education and moral and manual training of boys who have been unfortunate from any cause. Ralph Field, its superintendent, is the general superintendent of the league. The official organ for this work is a weekly called "Brightside," published at Denver.

The New Education.

Rochester, N. Y.—Miss Alida Lattimer, in the course of an address to the Ethical Club on "The New Education," said: "In regard to reading, whether for amusement or a purpose, the new method says, 'Reading is a means to an end; that end, thought.'

"The old methods produce ready readers; the new methods, less ready ones, perhaps, at first, but more thoughtful readers later on. The expression is from within outward, not from without inward, as must be the case when the child is set to decipher the fictitious cat catching a sham rat."

Speaking of politics in education, Miss Lattimer remarked, "In our state it seems to be left to the cities to decide the question as to who shall educate our children, the parents or the politician. Parents and teachers are supposed to know best what children need; yet boards of education resent any suggestion from teachers as to changing text-books. Do we dictate to the carpenter what tools he shall use in building our house? Do we tell him that if he cannot saw with a plane, we will hire a man who can?"

Sense-Teaching Results.

Chicago, Ill.—John H. Tear day was celebrated by the Chicago Institute of Education by an exhibition of the system founded by him. The exhibition was held in the Central music hall, and consisted of tests of the results obtained from educating the senses of the first- and second-grade children.

Standing with their hands behind their backs, the children

were given objects to test their sense of feeling. They described accurately the forms of blocks, different kinds of fruits, etc., and compared their sizes correctly. To test sight, sentences were written on the blackboard, and at once erased. Some sentences were in French, and some in words unintelligible to the children, and they were accurately reproduced.

In the sound tests, eight bells were tuned to the notes of an octave, and rung in different orders. The pupils were required to repeat the numbers of the bells in the order in which they rung. Scarcely a mistake was made.

Drawing in the Grand Rapids Schools.

Grand Rapids, Mich.—The art work in the public schools of this city is under the supervision of Miss Florence E. Ellis, a graduate of the Cooper art school, New York. Her plan is not to let drawing be taken up as a study by itself, but in connection with the other branches. History, nature study, and the rest, are illustrated by the pencil. Memory drawings are frequent, in which the children draw some scene or object which has come under their observation. They illustrate stories and poems, make designs for wall paper, oil cloth, plaids, and the like. Some of the best sketches have been made inside of fifteen minutes. Paper cutting is used as an aid in their work, and surprising dexterity is shown. In the first half year the children study the sphere, cube, and cylinder. They begin to draw with pencil, charcoal, and crayon. In the second half year, the hemisphere, square, prism, and right-angled triangular prism are taken up and studied from their corresponding forms in nature. The children build houses, towers, and churches, and then study and draw them. Colors are taught by the spectrum and colored papers.

In the second year, the ellipsoid, ovoid, cone, and vase form are taken up, and the children study landscapes, flowers, fruit, vegetables, and animals as type forms. From this beginning the work is carried into the higher grades, developing the child's individuality, strengthening his sense of beauty and his ability to create.

Credit of a Quaker.

Dr. A. T. Bull, of Buffalo, says the New York "Times," speaking of his student days in the New York university, told of a visit of himself and some classmates to the old book-store of Wood Brothers, in Barclay street. They wanted about \$35 worth of books, but lacked the necessary money. So young Bull was delegated to apply for credit. Being the possessor of an honest Quaker face, he was kindly received at the store, and the elder Mr. Wood, himself a Quaker, asked: "What is thy name?"

"My name is Bull," replied the young student.

"Is thee a relative of Ebenezer Bull, of Hamptonburg?" inquired the elderly Quaker.

"He is my father's cousin," said Bull, with some misgivings as to the commercial value of so remote a relationship.

"Then thee can have all the books thee wants, young man," said Mr. Wood, with a degree of emphasis that made the impecunious student feel like a millionaire.

Korean Students in Virginia.

Salem, Va.—Roanoke college has had a steady increase for six years in the number of her students, until now the enrollment is the largest in the history of the college. A special feature of the coming Commencement day will be the graduation of Kin Beung Surh, one of the five Korean students of the college, and the first Korean to take the degree of Bachelor of Arts in the world. Prince Eni Wha, second son of the emperor, Prince Min Young Whan, representative of the emperor at the coronation of the czar, Mr. Ye Pom Clim, minister to the United States, and Mr. Ye Eni Tom, secretary of the Korean legation, have accepted invitations to be present.

Progress in Maine Schools.

State Supt. Stetson, in speaking of the educational advantages of Maine schools, says that he often finds graduates of Mt. Holyoke and Wellesley teaching in the district schools. Many teachers who have received their education in Maine are now doing good work in other states. As a rule, the people of Maine are conservative, and have little use for fads. On the other hand, it is somewhat difficult to introduce methods that have proved successful elsewhere. But the people are beginning to study their schools. They are demanding better prepared teachers, more thorough work, better books and appliances. The Grange is working for the advancement of the schools, and many of the clergymen are setting apart a Sunday for consideration of school interests. The newspapers are giving more space to school work than formerly. About one-fifth of the teachers attend summer schools.

The farmers take a good deal of interest in the schools, and aim to establish radical changes along practical lines.

Regents' Examinations.

Regents' examinations, under the control of the University of the State of New York, will be held in 1898 at the following times and places:

March 23-25, inclusive, at New York, and about 400 academies and high schools; fifty-four subjects.

June 13-17, inclusive, at New York, and about 425 academies and high schools; seventy-seven subjects.

September 27-29, inclusive, at New York, Albany, Syracuse, and Buffalo; twenty-eight subjects. September examinations are for professional and technical students only.

New York City Notes.

Standing Committee of the Board of Education.

The following standing committees of the central board of education have been announced by Pres. Hubbell:

Finance:—Hugh Kelly, chairman, Manhattan-Bronx; Henry W. Maxwell, Brooklyn; Otto T. Bannard, Manhattan-Bronx.

By-laws and Legislation:—E. Ellery Anderson, chairman, Manhattan-Bronx; J. Edward Swanstrom, Brooklyn; John G. Agar, Manhattan-Bronx.

Committee on Buildings:—Jacob W. Mack, chairman, Manhattan-Bronx; John McNamee, Brooklyn; John E. Eustis, Manhattan-Bronx; John C. Agar, Manhattan-Bronx; Howland G. Leavitt, Queens; John R. Thompson, Brooklyn; Hugh Kelly, Manhattan-Bronx.

Committee on Sites:—John McNamee, chairman, Brooklyn; Nathaniel A. Prentiss, Manhattan-Bronx; Frank Perlet, Richmond; Otto T. Bannard, Manhattan-Bronx; J. Edward Swanstrom, Brooklyn; William Greenough, Manhattan-Bronx; Henry W. Taft, Manhattan-Bronx.

Committee on School System:—Nathaniel A. Prentiss, chairman, Manhattan-Bronx; Horace E. Dresser, Brooklyn; William Greenough, Manhattan-Bronx.

Committee on Supplies:—Henry W. Maxwell, chairman, Brooklyn; Henry A. Rogers, Manhattan-Bronx; Edward L. Collier, Brooklyn.

Committees of the Borough Board of Manhattan-Bronx.

President Hubbell has appointed the following standing committees of the school board of the boroughs of Manhattan and Bronx:

Finance Committee:—Joseph J. Little, chairman; Richard H. Adams, Otto T. Bannard, Robert Maclay, Henry Rice.

Committee on By-laws and Legislation:—John E. Eustis, chairman; E. Ellery Anderson, Walter E. Andrews, Alex. P. Ketchum, Nathaniel Prentiss.

Committee on Supplies (including hygiene, etc.):—Daniel E. McSweeney, chairman; Walter E. Andrews, Hugh Kelly, James P. Lee, Henry Rice.

Committee on Teachers:—Charles C. Burlingham, chairman; E. Ellery Anderson, Otto T. Bannard, Nathaniel Prentiss, Henry A. Rogers.

Committee on Special Schools:—Henry A. Rogers, chairman; Charles C. Burlingham, Hugh Kelly, James P. Lee, Robert Maclay.

Committee on Studies:—William Greenough, chairman; John G. Agar, William H. Hurlbut, Jacob W. Mack, and Henry W. Taft.

Committee on High Schools:—Henry W. Taft, chairman; John G. Agar, William Greenough, Alexander P. Ketchum, and Jacob W. Mack.

Committee on Sites and Buildings:—Richard H. Adams, chairman; John E. Eustis, William H. Hurlbut, Joseph J. Little, and Samuel McSweeney.

Annual Meeting of the Male Assistants' Association.

The annual meeting of the Male Assistant Teachers' Association, of the boroughs of Manhattan and Bronx, will be held Saturday, March 5, at 11 A. M., in the City college, Lexington avenue and 23d street. Officers for the ensuing year will be elected, and other important business transacted.

Dr. Draper Declines New York Superintendency.

Champaign, Ill.—Pres. Draper, of the University of Illinois, is not willing to be a candidate for the superintendency of the New York city schools, nor will he accept the position if it is offered to him. A committee of the New York board of education notified Dr. Draper that he would be elected almost unanimously if he were eligible under the statute and would accept. To this communication Dr. Draper replied:

"I have your statute and am clearly eligible, but have fully and finally decided that I cannot accept. I should decline if elected."

The Brooklyn borough board has decided that its drawing committee need not pass judgment upon every work of art presented to a public school. The opinion of a local committee and the supervisor of drawing is to be considered sufficient.

Architectural League Exhibition.

The thirteenth annual exhibition of the Architectural League of New York, was held at the galleries of the American Fine Arts Society, 215 West 57th street, from Feb. 12 to March 5, inclusive. Several of the school and college designs on exhibition are especially interesting. The competitive designs for the College of the City of New York were submitted by Archs. William B. Tuthill, George Martin Huss, George B. Post, Charles C. Haight, Cady Berg and See, and Herts and Tallant. Hobart A. Walker's design for the Erasmus Hall high school, Brooklyn, is also on exhibition. The plans for the new University Settlement buildings, by I. N. Phelps Stokes and John Mead Howells, are interesting examples of convenient, but comparatively inexpensive, structures. The

proposed tavern for Columbia university students completes the list of college designs.

One design in the Newark high school competition is shown, and an attractive design for a medium-sized school building is one submitted by Arch. D. K. Boyd, of Philadelphia, for a school at Wayne, Pa. Of the larger and more elaborate plans, two that are worthy of special mention are the Hartford public high school design, by George Kellar, and the Scranton high school, by Archs. Little and O'Connor. Boring and Tilton submit two attractive plans and designs—one for a public school in Queens, L. I., and the other a high school at Mt. Vernon, N. Y.

New Buildings.

New York.—Buildings under contract, not yet completed: P. S. 1, Henry, Oliver, and Catharine streets; P. S. 63, Fulton avenue and East 173d street; P. S. 157, west side of St. Nicholas avenue; P. S. 137, Grand and Essex streets; P. S. 12, East Broadway, Henry, Scammel, and Gouverneur streets; P. S. 20, south side of Rivington street; P. S. 42, north side of Hester street; P. S. 158, east side of and Burnside avenues; P. S. 165, south side of 109th, between Amsterdam avenue and Boulevard; P. S. 166, 89th street, between Columbus and Amsterdam avenues; P. S. 159, East 119th street, between Second and Third avenues; P. S. 164, 141st street and Brook avenue; P. S. 40, East 19th and 20th streets, between Second and Third avenues; P. S. 167, Mott and Walton avenues, 144th and 146th streets; P. S. 169, west side of Audubon avenue, between 168th and 169th streets; P. S. 173, south side of 183d street, between Beaumont and Cambridge avenues.

Contract now before the board of education for approval: P. S. 168, 104th and 105th streets, between First and Second avenues.

Buildings for which plans are being prepared: P. S. 50, addition; P. S. 120, addition; P. S. 171, 103d and 104th streets, between Fifth and Madison avenues; P. S. 172, 108th and 109th streets, east of First avenue; P. S. 174, Attorney street, between Rivington and Stanton streets; P. S. 46, 156th street, near St. Nicholas avenue, addition; P. S. 98, Park avenue and Second street, Williamsbridge; boys' high school, west side of Tenth avenue, between 58th and 59th streets; mixed high school, 166th street, between Boston and Jackson avenues; girls' high school, 114th and 115th street, west of Seventh avenue.

Manhattan and the Bronx.

The borough school board of Manhattan-Bronx introduced amendments to its new salary schedule for teachers on Wednesday last, requiring principals as well as teachers to take examination for promotion and increase of salary. These amendments, which will be voted upon at the next board meeting, were not made public, but *The School Journal* representative learned that at least one examination will be required of principals besides the examination preceding appointment.

President Hubbell announced that the January pay rolls, as corrected, were in the hands of the comptroller and that teachers would be paid this week. Mr. Davenport and his force of clerks in the office of the board received the pay rolls from the corporation council Monday noon, and they worked night and day for a day and a half, correcting them, so that they might be sent with the least possible delay to the comptroller.

Mr. Lee, of the committee on teachers, has changed places with Mr. Anderson, of the committee on special schools. The board voted to transfer the powers and duties of the former committee on evening schools to the new committee on special schools, and to extend the free lecture course from April 1 to May 1.

A letter from the Male Principals' Association requested the board to delay action in the case of Henry P. O'Neil, suspended from the principalship of P. S. No. 1.

A motion by Mr. Little, seconded by Mr. Ketchum, to make the borough school superintendent a member, ex-officio, of all committees of the school board was voted down 17 to 2 by referring it to the committee on by-laws and legislation, Messrs. Little and Ketchum alone voting in the affirmative.

The following nominations of teachers have been made by the borough superintendents: John Scally, Jr., \$1,080; Hugh C. Laughlin, \$1,080; DeKeller Stamey, \$1,080; Andrew E. Eichman, \$1,080; Nomer Gray, \$1,080; John E. Graham, \$1,080.

From the eligible list: P. S. No. 1, Joseph H. Dealy, Mary E. McFarland, Elnita Strauss; 8, Mary A. Doody; 11, Andrew E. Eichmann; 13, Pauline Cumpert; 15, I. Edwin Goldwasser, Harmon B. Biver; 21, Cora R. Lind; 23, Amanda Lynch; 25, Bernard J. Cooper, Frederick Schoendel; 27, Walter Findlay; 32, Joseph Chankin; 34, Mark Hoffman, Michael Rosenberg, Abraham Radgik, Arthur R. Hurlbut; 46, Jacob Milsner; 51, Bertha R. Spring, Anthony Pugliese; 52, Louis R. Lawyer; 54, John E. Wade; 57, Lulu V. Strauss, Elizabeth Brundage; 67, Hugh C. Laughlin, Bertha M. Presby; 74, Robert L. Browne; 77, Etta Sturtz; 79, William Krampner; 82, Rosabelle Ruthenberg; 86, William E. Grady; 90, Margaret A. Shannon, Henrietta Hassard; 94, Flora Molwitz, Florence M. Campbell; 107, Addie O. Christianson; 110, Lucille H. Nicol; 151, Ida M. Charles; 154, Little Ryttenberg, Gertrude C. Middlebrook; 42, Mary A. Maher, former teacher; 101, Mary E. Sliver, former

teacher; 44, De Keller Stamey; 55, Walter Findlay; 57, Edyth Ryttenberg, Marguerite F. C. Reilly; 60, John E. Graham; 61, George Vogel; 79, Maurice Simmons; 101, Alfred T. V. Brennan; 112, Mary Hanlon; 121, Josephine McEvoy; 155, George Dorland; 156, Estelle Meckel.

The superintendents also request that the following named married women be employed as teachers: Mrs. Rebecca Chambers, Emily D. Reynolds, Edith C. Booth, Alcy Beaty Wood, Sara Peddie Hanner, Fannie Guile.

The following special teachers of German were nominated: P. S. No. 90, Adolph Dreyspring; 89, Hugo Dircks; 93 and 154, George Sternberg; 38 and additional classes in 93, Elise H. Boetticher; 77 and additional classes in 88, Ida Pniower; additional classes in 23, 34, 79, 26, 75, 30, Emil A. Storm; 142 and additional classes in 78, Emilie Nida. Marion C. Pollard was recommended for transfer to P. S. 125.

Changes in Salaries and Promotions.

The new salary schedule for teachers of Manhattan and the Bronx, published in last week's *School Journal*, was changed in one important particular, on passing the borough school board last Friday. The number of examinations for promotion of teachers to higher grades of salary was reduced from four to two, and two additional licenses over what have been heretofore required, were established. Principals do not have to pass formal examinations for increase of salary.

Teachers' salaries as they will hereafter stand are: Men—probationary, \$720; grade 1, \$1,080, grade 2, \$1,350, grade 3, \$1,620, grade 4, \$1,890, grade 5, \$2,160; women—probationary, \$504; grade 1, \$573, grade 2, \$726, grade 3, \$873, grade 4, \$1,056, grade 5, \$1,290. The term of service in each grade before application for promotion is the same as under the July and December schedules.

There are three teachers' licenses: A, B, and C. License A authorizes the holder to teach in service grades 1 and 2, at the salaries above given; license B to teach in grades 3 and 4, and license C to teach in grade 5. Teachers must pass the formal examinations described last week to secure licenses B and C. But a teacher may be promoted from grade 1 to 2, covered by license A, and from grade 3 to 4, covered by license B, with increase of salary in both instances, without passing any formal written examination. There are, therefore, all together, four examinations, one for preliminary license, and one each for permanent licenses A, B, and C. All these examinations, as before stated, will be conducted by a central examining board, appointed by the board of education, and will be upon questions prepared by the several borough boards of superintendents.

Supt. Jasper strongly opposed any formal written examination of teachers for increase of salaries.

Mr. Little proposed a schedule adding, for twenty years, \$60 a year for men and \$36 a year for women to the minimum salary without formal written examinations. His plan was voted down, 16 to 1, and the new salary schedule adopted by the same vote.

The new by-laws adopted divide the old committee on instruction of the borough board into two committees—a committee on studies and a committee on teachers. The committees on buildings and sites were consolidated, and the committee on evening schools abolished, its duties passing to the committees on teachers, studies, and high schools. A new committee on special schools, for supervising the vacation schools, and other special schools, was adopted.

The teachers pay-rolls for January are now before the corporation council. If he decides that the rolls are legal, teachers will soon be paid.

Briefer Notes.

Dr. Walter B. Gunnison, principal of Erasmus Hall high school, Brooklyn, has been mentioned as a compromise candidate for city superintendent. Comptroller Coler is said to favor his election, and he is the second choice of the Brooklyn delegation to the central board.

The Brooklyn Teachers' Association held its third conference in the Packer institute on Feb. 8. The subject was "The Teacher's Duty Toward the School and Towards its Head" Oliver D. Clark, of the Boys' high school, and Prof. W. C. Lawton, of the Adelphi, were the principal speakers. The next conference will be held March 5, at Adelphi academy. The subject will be "The Head of the School, His Relation to the Teachers and to the School," and addresses will be made by Prin. Larkins, of the Manual Training school, Prin. McAndrew, of Pratt Institute high school, and Prin. Gunnison, of Erasmus Hall high school.

Long Island City, N. Y.—A resident of this city has purchased the warrants of a number of the unpaid teachers, at a discount of 8 per cent. As a result, about \$6,000 has come into the possession of some of the teachers whose salaries have not been paid for nearly five months. The teachers eagerly accepted the proposition.

The corporation counsel, in returning to the board of education of Manhattan and the Bronx the January pay-rolls, rendered his decision on the question of an additional bonus of \$12 to teachers in certain grades who have boys or mixed classes. The old bonus was \$60, while the new rule provided

for \$72. The corporation counsel held that only a few primary teachers, who had passed examinations for the purpose, should receive the additional bonus.

The Potter & Putnam Company, educational publishers, dealers in school supplies and school furniture, announce their incorporation, under the laws of New York state, as successors to Potter & Putnam. Mr. Potter and Mr. Putnam will continue in active service, and Mr. Herbert J. Pratt, for eight years with Dodd, Mead & Co., has become an active member of the corporation. The company has assumed the agency for the sale of school furniture and opera chairs of Thomas Kane & Co., and Mr. H. D. Warner, late manager of the Thomas Kane Co., will have charge of this department. The Buffalo office, in the Mooney-Brisbane building, will continue under the charge of Mr. H. D. Bacon.

The James B. Wilson Company, wholesale stationers and booksellers, has been incorporated under the laws of the state of New York, as successor to James B. Wilson. The capital stock has been increased, and the business will be extended in all its branches. Mr. Wilson is president and general manager of the new corporation.

Comptroller Coler has made the announcement that there is no money left in Long Island City to pay the salaries of the school teachers and other employees up to January 1, 1898. The only resource for the teachers is to bring suit against the city of New York, and get the money out of the city's judgment fund.

Rockaway, L. I.—Work is progressing rapidly on the three new school buildings here. The Central school-house, at Holland's station, is nearly ready for the roof. The Arverne school has its brick and stone wall finished up to the second story. The third school in the Rockaway park section is approaching completion. All three will be finished by July 1. M. Gibbons & Son are the contractors.

Prof. Franklin T. Baker, of Columbia university, will give a course of ten lectures on "English Literature," at the Normal college, Lexington avenue and 68th street, at 4 P. M., beginning Thursday, March 3, 1898, under the auspices of the Primary Teachers' Association. Subject of first lecture: "The Interpretation of Literature." Terms for the course, \$2.00.

The Society for Ethical Culture is agitating the question of free trade-schools for girls. The object is to provide an opportunity for poor girls to become skilled workers of a good industrial education.

Items from Everywhere.

The Belgian minister at Washington, acting for his government, is securing data relative to nautical schools in this country, and it is probable that the scholarship system will be introduced in Belgium.

Kearney, N. J.—The Hudson County Association of Teachers has been formed for the purpose of promoting mutual improvement and fraternal feeling. The officers are: President, Prin. M. H. Kinsley; vice-president, Prin. Ortel; secretary, Prin. Robeson; treasurer, County Supt. Murphy.

Des Moines, Iowa.—The board of education has unanimously condemned the Ray bill, now pending before the legislature, providing for uniformity of text-books by state publication. The legislative committee of the State Teachers' Association, claiming to represent nine-tenths of the leading educators of the state, are unanimously of the opinion that the bill would work against the best interests of the schools.

At a meeting of the Philadelphia board of education, an amendment to the rules was adopted, providing that the payment of \$40 additional to teachers of the first grade shall be only to those teachers who were receiving this additional sum at the close of 1897. A special committee was appointed, consisting of the chairman of the committee on scholarships and the president and chairman of committees on the higher schools, to make arrangements with the University of Pennsylvania, Bryn Mawr college, and such other universities as may offer \$100 scholarships to the public schools, under the terms of the ordinance of the council appropriating \$2,500 for the purpose.

The Bergen County Teachers' Association will meet at Union street school, Hackensack, Saturday, March 5, at 9:30 A. M. The speakers will be Miss Hester M. R. Warner, of Brooklyn, who will speak on the "Ward Method of Teaching Reading," and Mr. Ossian H. Lang, editor of *The School Journal* and *Educational Foundations*, who will present "Pressing Problems in Education." The treasurer wishes all to come prepared to pay their dues for the year, as the money is needed. Alice Bryant Perry, Secretary.

Senator Joe. A. Edwards introduced a bill in the Iowa legislature, and is now urging its passage by the joint appropriation committees of the house and senate, to appropriate \$88,100 to replace the burned library building at the state univer-

sity. \$75,000 must be expended for books and re-placing the destroyed apparatus, leaving \$13,100 for re-building. Fifteen thousand dollars in addition is appropriated "for the further support of the state university in its several departments and chairs, and in the aid of the income fund, and for the development of the institution." The third appropriation is for \$26,000, as follows:

Law library.....	\$ 5,000
Publications	2,000
Physical and electrical laboratory.....	2,000
Zoological laboratory.....	2,000
Geological laboratory.....	1,000
Botanical laboratory.....	1,000
Psychological laboratory.....	1,000
Morphological laboratory.....	1,000
Department of political science.....	1,000
Repair and contingent fund.....	10,000

Minneapolis, Minn.—A mass meeting was held in this city the last of February, to raise \$90,000 by popular subscription, in order to keep the schools open for the rest of the school year. C. A. Pillsbury, the miller, telegraphed a subscription of \$5,000.

Several months ago Dr. Emerson E. White gave a series of talks on educational subjects in a number of Eastern cities. These attracted large audiences, and he has been asked to address other meetings in the Northern and Middle Atlantic states during the month of March. Dr. White still has a few dates left, and educational associations desirous of hearing him may address him immediately at his home, Columbus, Ohio, or care of *The School Journal*, New York city.

Centralia, Ill.—Supt. Irwin F. Mather has had blanks printed to be sent to parents of the school children, containing the following, which the parents are asked to answer: Name of pupil. Has pupil any defect of sight? Has pupil any defect of hearing? Does the general health affect the pupil's ability to do the regular work of the school? Kindly write anything regarding appetite, headache, digestion, etc., which will aid the teacher in judging of the pupil's work. If pupil's health is perfect, this may be left unanswered. Does pupil take exercise and recreation? If so, in what way? Do you think the teacher requires too much of the pupil? Could your child use more time profitably in study? How much time does pupil spend daily in study out of school? Kindly suggest any way in which the teacher may prove more helpful to your child.

Philadelphia.—The councils have appropriated \$140,000 for stationery and books for the public schools, which is a decrease of \$20,000 from last year's appropriation. Of this amount, the grammar, secondary, and primary schools received \$109,156.35 and \$21,400 was divided among the higher schools as follows: Boys' Central high school, \$5,100; girls' normal school, \$3,000; girls' high school, \$10,000; Central Manual Training school, \$1,500; Northeast Manual Training school, \$1,150; James Forten Elementary Manual Training school, \$350; Industrial Art school, \$300.

The government of Germany has issued a decree forbidding the attendance of foreign students at the Berlin Technical high school. The foreign students in other institutions fear that the decree will be extended. The reason for the exclusion, it is claimed, is that the foreign students use their education to the detriment of German industries.

Cortland, N. Y.—Prof. Darwin L. Bardwell, of the department of sciences of the Cortland normal school, has resigned his position, to accept an appointment as inspector of union schools and academies.

Syracuse, (N. Y.) University.—Architectural plans have been completed for the new Hall of Science, which will be erected on the campus of Syracuse university during the summer. The hall will contain the departments of physics, civil and electrical engineering, and the laboratories will be supplied with the most modern and expensive apparatus for thorough work in these sciences. The work of erecting it will be begun early in the season, with the purpose of having it completed and ready for occupancy at the opening of the college year next fall.

Portland, Ore.—At a recent meeting of the Portland school board, the salary of teachers of the second and third grades was increased \$5 a month. The maximum salary of those grades now is \$60 a month; the minimum, \$55.

Frankfort, Ky.—The new text-book law has passed the lower house of the assembly, and has gone to the senate. The chances are against its final passage.

Syracuse, N. Y.—Arrangements have been completed whereby a summer school of sociology will be inaugurated by Syracuse university this season. The dates set are from June 27 through July 9. The school will be divided into five departments and twelve lectures will be delivered in each of the following departments: General Sociology; City Government; Crime, Pauperism, Child Saving, Inebriety; Money and Banking; Political Economy. Next year a summer school will be established in all departments of the College of Liberal Arts.

Cambridge, Mass.—Provision is made in the schools of this city for the completion of the grammar course in four, five, or six years. The course is divided into four or six sections, each section representing a year's work. If a pupil falls behind in the four-years' course, he can drop back to the six; and a pupil in the six-years' course who wishes to go faster, may be promoted to the four. Or a pupil may complete one-half the course in two years, and the other half in three.

Brockport, N. Y.—David Eugene Smith, Ph.D., a graduate of Syracuse university, has been chosen principal of the Brockport normal school. His administration will begin at the end of the present school year. Dr. Smith is joint author with Prof. Beman, of the University of Michigan, of a textbook in geometry.

Newark, N. J.—The board of education has adopted the budget for the ensuing year. The grand total is \$544,353, of which the city will raise \$399,421, and the state the rest.

Baltimore, Md.—The proposed introduction of physical culture in the schools of this city has been stopped by the announcement of the comptroller, that he refuses to warrant the extra \$7,000 in salaries without authority from the city council.

A full-sized, high-speed passenger locomotive, valued at \$12,000, has just been given to the engineering school of Columbia university, by the Baldwin Locomotive Works, of Philadelphia. The locomotive will be mounted on friction wheels, fitted with brakes, so that it can be run at its highest speed. The consumption of fuel, the tractive power at different speeds, and the development of the power may be studied by means of various appliances.

Wheeling, W. Va.—The community of the Sisters of the Visitation was founded here fifty years ago, and conducted a female academy until the founding of Mt. de Chantal, an educational institution of wide fame. The fiftieth anniversary will be celebrated in connection with the commencement exercises in June.

Dr. Maximilian P. E. Groszmann, former superintendent of the Ethical Culture schools of New York, in his lecture on "Manual Training," in Richmond, Va., urged teachers and parents not to repress the natural instincts of children. Manual training fosters the play instinct in the child, and also teaches the true dignity and moral significance of labor.

In his lecture on "Art Culture," he agreed that art instruction must be based on the natural desire of the child to express an individual thought or feeling, and not on mechanical exercises. Dr. Groszmann suggested as exercises in art work: (1) Conceptional drawings—from memory; (2) object drawing; (3) imaginative drawing; illustration and composition; (4) decorative work.

Kansas City, Mo.—The Garrison school for negroes is experimenting with manual training for the boys and domestic work for the girls. So far, the work has been successful, and it is probable that the system will be extended.

Toledo, O.—Mayor Maybury and the school board of Detroit recently made a visit to the manual training school of this city, with a view to the establishment of a similar school in Detroit.

Cambridge, Mass.—Prof. Charles Eliot Norton has announced his intention of retiring from active work at the end of the year. Prof. Norton is the oldest member of the faculty, and holds the chair of fine arts, formerly held by Longfellow and Lowell.

Prof. Charles R. Richards, formerly of Pratt institute, Brooklyn, has been appointed head of the manual training department of the Teachers college, of Columbia university.

Albany, N. Y.—According to the annual report of the state board of regents, Columbia leads the list of universities, with 289 teachers, 1,921 students, and a property of \$17,905,277. Cornell, New York, and Syracuse universities follow in order. The state has 53,464 students enrolled in her high schools and academies, or one-eleventh of the whole number in the United States.

Philadelphia, Pa.—The Association of School Board Officers will meet on March 21, to consider a plan for the uniform election of teachers on the basis of merit. The plan is submitted by Dr. W. W. Roach, and provides that all graduates of the normal school shall have blanks, properly filled out and attested, which will show the school record of each student; that selection of teachers shall be by ballot at regular meetings of the board, instead of by committee of the school in which there is a vacancy; and that elections shall be made for one year only, to test the powers of the teacher.

Oneida, N. Y.—A special school district meeting is to be held here on March 28, to vote on the proposition of the school building committee for the erection of two primary school buildings, at a cost of about \$24,000.

Letters.

Teachers' Contracts.

Schools are often injured and those in charge of them are often caused much annoyance because teachers resign without giving sufficiently long notice.

On the other hand teachers are often dismissed, either without a fair trial, or without due notice.

At the latest meeting of the Massachusetts Superintendents' Association the following report was accepted and adopted:

"It is our judgment that no attempt should be made by superintendents or those in charge of school affairs to induce teachers to leave their positions immediately before the beginning of the fall term, or during the first and last month of the school year; that no attempt should be made to induce teachers to leave their positions except after notice of four weeks; that no teacher should be considered an available candidate for a new position until he shall have served at least one year in his present position, unless he has made it a condition of acceptance that he may leave at any time after giving proper notice; that teachers should be mindful of the interests of the schools in which they teach, and should be unwilling to leave their positions unless released by those who have employed them; that teachers should be unwilling to leave positions wherein they have not served at least one year, unless they have made it a condition of acceptance that they may leave at any time after proper notice; that it is the duty of school authorities, after notice of four weeks, to release teachers who can materially better themselves, unless there are unusual circumstances making such a change exceptionally injurious to the schools; that we deprecate any contract with teachers which is made mainly for the benefit of district, town,

or city, whereby school authorities seek to obligate teachers to a greater degree than they obligate themselves."

If teachers, superintendents, school boards, and teachers' agencies would all try to carry out the foregoing ideas there would be a great gain. Let us all try to follow them ourselves and disseminate them among others.

Sandwich, Mass.

Burt Jay Tice,
Supt. of Schools.

Trip to the Museum.

In *The School Journal* of Feb. 19, there was an interesting article on "A Trip to the Natural History Museum," by Henry G. Schneider. There can be no doubt of the advantages and the good results achieved by such trips, and I believe that the advantages offered by our public museums for nature and art study are appreciated by both teacher and pupil.

But it is not the public school teacher only who avails himself advantageously of the benefit of these institutions. I am a teacher of German, give nature study, and take my pupils to the museums. They are delighted with the work we do, look forward with pleasure to their lessons, and there is neither dullness nor inattention.

I have come in contact with many a teacher of German, discouraged with her work, deriving neither satisfaction nor pleasure from her task. Let her try nature study; her pupils will be eager and attentive; she will feel a pleasure and satisfaction, which will be a stimulus in her work.

Johanna May.

"Practical" and "Thorough."

Editor of *The School Journal*:—Could you persuade the writer of the article in *The Journal* of February 12, entitled "True Functions of the Public School," to tell what subjects he would have taught that would result in "an education (1) practical for the every-day life of the pupil, (2) thorough, not superficial, (3) in the line of giving mental strength and discipline"?

IMPORTANT NEW BOOKS.

A COURSE IN MECHANICAL DRAWING.

Introductory Course in Mechanical Drawing. By JOHN C. TRACY, C.E., Instructor in the Sheffield Scientific School, of Yale University, with Chapter on Perspective, by E. H. LOCKWOOD, M.E. With Illustrations including Reproductions of Photographs of Models. Oblong 4to, Cloth, \$1.80; by mail, \$2.00.

This work is intended for use in High Schools, Manual-Training Schools, Preparatory Schools, and Technical Schools. It is strictly an introductory course, embracing the ground which a student should cover before taking up special lines of drafting, such as Machine Drawing and Bridge Drawing. While our best schools require such an introductory course, most text-books give but little space to fundamental principles, and lead the student almost immediately to practice in special lines.

The titles of the chapters indicate the ground covered—viz.: The Selection of the Outfit, The Use of the Drawing Instruments, Working Knowledge, Isometric and Cabinet Projection, Orthographic Projection, Special Applications of Orthographic Projection (Including Surfaces of Revolution, Plane Sections, Intersections, and Shadows), Perspective, and Working Drawings.

Two separate but parallel courses of problems are given. Each problem has been selected for some principle which it involves, and the whole is so arranged as to form a progressive series. Any problem of one course can be interchanged with the problem in the other course having the corresponding number, without affecting the general plan. Thus either course, or combinations of the two, can be used, avoiding the necessity for repeating the same course year after year. In addition there is a supplementary course (chiefly working drawings of familiar objects), intended to make practical applications of the principles learned in the regular course.

A LABORATORY MANUAL OF PHYSICS.

A Manual of Experiments in Physics: Laboratory Instruction for College Classes. By JOSEPH S. AMES, Ph.D., Associate Professor of Physics in Johns Hopkins University, Author of "Theory of Physics," and WILLIAM J. A. BLISS, Associate in Physics, in Johns Hopkins University. 8vo, Cloth, \$1.80; by mail, \$2.00.

This is a thoroughly practical and helpful volume, viewing its subject from a modern standpoint, and designed to offer the most approved methods of demonstration.

The work contains nearly 100 experiments which are divided into six sections: Preliminary, Use of Measuring Instruments in General, Mechanics and Properties of Matter, Sound, Heat, Electricity and Magnetism, and Light. Each section has an introduction giving a discussion of the general principles involved in the section and of the system of units to be used.

Each experiment is divided into seven parts: Object of Experiment, General Method of Performing It, The Theory of the Method of the Physical Principles, The Formulae, etc., Sources of Error, Briefly Stated, List of Apparatus Necessary for the Guidance of the Instructor or the Custodian of Apparatus, Manipulation, A Full Description of the Actual Process of performing the Experiment, An Illustration of the Results as Actually Observed in the Laboratory by Students of Former Years, Questions and Problems Bearing Upon the Experiment and its Application.

At the end of the experiments proper, there are three supplementary chapters devoted to general laboratory methods and processes, to the discussion of laboratory equipment, and to the construction and selection of galvanometers. Numerous tables of physical constants and numerical quantities, including logarithms, are also added.

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It might assist if he would tell what he means by "practical," how much of each subject must be taught that the work may be 'thorough,' and how they may be taught that "mental strength and discipline" may be secured.

Geo. W. Gamble.

New Canaan, Conn.

Out-of-Town Appointments and New York Teachers.

Fairly stated, the argument for making "out-of-town" appointments is that New York city is entitled to and should command the best talent in the teacher's as in every other profession. No intelligent New York teacher objects to the importation of the best teaching talent of the country. They have welcomed to their ranks many teachers from out of town. In state and national conventions they are delighted to meet and measure themselves with the best men and women of the country. What they do object to, is that the New York teachers should be debarred from competition with others. It seems as though pedagogical experience in New York city is to be considered of no value in weighing the merits of candidates for appointment. Yet for many years candidates for teachers' licenses from Yale, Harvard, and from all sections of the country, have failed to prove their superiority to native talent subjected to the same tests.

The regulations for high school appointments seem to have been devised so as to shut out home talent. After the expert board of superintendents had nominated two principals from other cities, they nominated one from New York city. Then, and not till then, did the committee pass the resolution that "high school principals must show experience in the management and organization of a high school in some large city." This at once made the New York candidates ineligible. The instructors were divided into three grades, and experience in a high school required from them. So only the lowest grade (and that the least paid) is open to New York city teachers. Only thirty of the 5,000 teachers of New York city could enter the examinations. The few who did enter were rejected, for only three out of eighty-one appointments were of New York teachers. Owing to the regulations, many applicants who had the experience demanded for the highest grades passed worse examinations than applicants for the lowest grades. One teacher of my acquaintance, a field botanist whose work has been commended by Prof. Britton and the Torrey Botanical club, was rejected, while the book botanist, from the out-of-town high school, was appointed. By such rules our three high schools are liable to be manned by a staff of instructors who have not learned the attainments of the city's boys and girls, and who are out of sympathy with their special needs and modes of thought.

But the real pedagogical injury done to our system is not so evident to the unprofessional mind. New York city has been unique in its solution of the vexing problem of the closer articulation of the elementary schools with the colleges. In the Normal college and the College of the City of New York, the city possesses institutions that for fifty years have bridged the gap between the college and the common school. For fifty years the City college has answered its purposes and adapted itself to the changing needs of our cosmopolitan population. It takes a grammar school boy, gives him a high school education in its sub-freshmen class, and after four years of college work has him fitted for professional and business training at the age of nineteen years. Its alumni have proved their ability and the fitness of their training by an unbroken series of victories in competitive examinations for scholarships and prizes, and in active professional life. The usefulness of our City college has been impaired by engrafting upon our system an alien high school idea, which is admittedly deficient, and does not possess the merit of articulating closely with either the schools below or the colleges above the high school grade.

H. G. Schneider.

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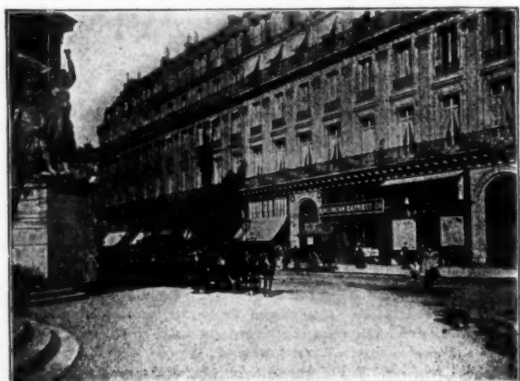
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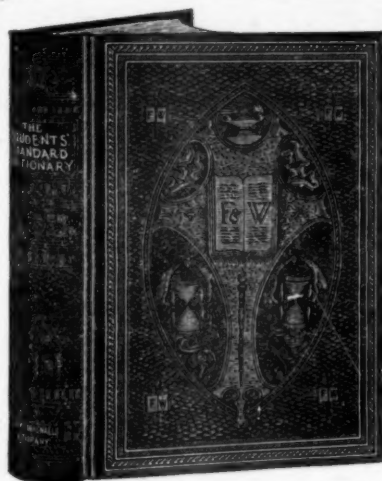


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	Vocab.	Terms	Synonyms	Illustrations	Antonyms	Prepositions	Pages
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Webster's Academic	36,059	3,654	800	None	None	704	
Worcester's New Academic	35,773	1,000	266	None	None	688	

Boston Herald: "The Students' edition of the Standard, just issued, is to be preferred to all other dictionaries meant for office or desk use, and for scholars in high schools and academies. It is quite sufficient for the needs of nine readers in ten."

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(Sch. district No. 4, *vs.* Baier et al., Weston, D. C., Dec. 10, 1897.)

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(Wagoner et al., *vs.*, Wise Co., Texas, S. C., Dec. 27, 189.)
1. The requirement of law (P. L. 471), that in the sale of real estate of a school district, the names of members of the board voting in the negative and affirmative shall be entered

on the minutes of the board, shall be substantially complied with.

2. Material departures in the sale of land of a school district from the terms of the advertisement, as to amount of land sold and terms of payment, invalidate the sale. (Strathem et al., *vs.*, Gilmore et al., Penn., S. C., Jan. 3, 1898.)

ELECTION OF SCHOOL OFFICERS.

A factional contest arose in a Kentucky town over the method of electing members of the board of education. *Held*, that as there is nothing in the charter prescribing the secret ballot in the election of members of the board, the voting should be viva voce, and those who are qualified to vote under the general school law may vote.

(Moss et al. *vs.*, Riley et al., Ky., ct. of app., Dec. 13, 1897.)

COLOR LINE IN SCHOOL BOARDS.

Oklahoma law (Chap. 34, Laws 1897) provides for the election of separate school boards of their own color for the white and colored people, each board to have jurisdiction over schools composed of children of its own color, and to have the same powers in management of school property, etc.

Held unconstitutional, being in conflict with 15th amendment to U. S. constitution. (Porter *vs.* commissioners of Kings Co., Okla., S. C., Jan. 10, 1898.)

BREACH OF CONTRACT.

Plaintiff was engaged for a year, at a salary of \$1,800, and discharged in two months. He worked on a farm for remainder of the year. Jury found that he earned \$48 on the farm, and saved \$325 in living expenses by the change. Plaintiff appealed. *Held*, that the \$325 should not be deducted from the wages to be paid under the contract in computing damages. (Gates *vs.* School Dist. Ark., S. C., 21 S. N. R., 1060.)

MANDAMUS TO REINSTATE TEACHER.

Mandamus to reinstate teacher, on the ground of unlawful removal, will not be granted when nearly six years have elapsed before application for the writ is filed. (Stenison *vs.* board of education, New York city. N. Y. S. C., Aug. 4, 1897.)

EMPLOYMENT OF SOLDIERS.

Held, that a school under control of a school district is not a public department of the state; hence, does not come under the law (1896, C. 821) providing for preferential employment of veterans. (People *vs.* Heyward, N. Y. S. C., 46, N. Y. S. 1083.)

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Interesting Notes.

Danger in Tin Cans.

Open a can of peaches, apricots, cherries, or other fruit—for all fruit is acidulous—let it stand for some time, and the fruit acids and the tin are ready to do their work of poisoning. A chemical knowledge that tells just how the dangerous compound is created is unnecessary to an avoidance of the peril. The rule to follow is never to make lemonade or other acidulated drinks in a tin vessel nor allow them to stand in a vessel of tin; and in the case of canned fruits or fish, immediately upon opening the can, turn the contents out upon an earthenware plate, or into a dish that is made of earthenware or glass.

Fruits in hermetically sealed cans, if properly prepared, generate no poison. As soon as opened the action of the acid on the tin, with the aid of the atmosphere, begins, and in a short time the result is a deadly poison. This brief treatment of the question should be remembered by every one, and its instructions followed. The general press also should aid in disseminating the simple knowledge.—Ex.

Diamonds in a Volcano.

An interesting discovery from a geological point of view, was recently made by an explorer in the mountains of Witzi's Hoek, Natal, says "Le Genie Civil." On the summit of an extinct volcano, on the edge of a lake that occupies the crater, soundings revealed a layer of sand enclosing small diamonds. It would be interesting to know whether these diamonds were there accidentally, that is, as the result of washing operations carried on by the natives, or whether this discovery corresponds to an actual mine of diamonds, for the hills of Witzi's Hoek are not situated in regions known to be diamond bearing. On this last hypothesis, the presence of precious stones in the crater of a volcano would doubtless throw some light on the formation of the gems in nature.—"Popular Science."

A Portable Church.

A portable church was shipped to Jamaica on the British steamship Barnstable, which cleared the Philadelphia custom house a few days ago, for Port Antonio. It was built of wood, put together to make sure that the parts were right, then taken

down and stowed in sections in the hold of the Barnstable. This vessel, a fast fruit carrier, trades between Philadelphia and the West Indies. Down in Jamaica churches are few in the interior of the island, where the fruit grows, and the Americans, who do the greater part of the export fruit trade, decided to build a church which could be moved about as they deem proper to the places where the most good could be done with it. An American mechanic designed the edifice, and with it goes a bell to summon the worshippers. Books and a complete outfit of furniture accompanied the church.—"American Contractor."

Possibilities of Liquefied Air.

The possibility of manufacturing liquefied air on a commercial scale, has been amply proven, and the desideratum appears to be to find some sort of use for it in commercial quantities.

The interesting changes in the properties of metals and dielectrics at the low temperature of boiling air, lead to a bewildering variety of speculations as to the ultimate possibilities of insulation and conduction under these conditions. Whether or not we shall see pipe lines conveying liquid air from Niagara to New York, with conductors in cool and comfortable retirement within, is at least doubtful; but we may see a variety of very interesting electrical uses made of this new material. It is a high insulator and the most magnetic liquid known, with the exception of liquid oxygen, which is easily derived from it. Its normal temperature when quietly effervescing at atmospheric pressure is 185° C. (301° F.) below zero, or only 88° above the absolute zero. At this temperature pure copper becomes fifteen times, and pure iron twenty-three times as good a conductor as under ordinary circumstances.

The suggestions which crowd themselves upon the attention of one who thinks of the possibilities of usefulness of an agent giving these conditions are mostly vague, and must remain so until some definite statement of the cost of liquefying air can be had. Prof. Fleming has already pointed out that by its agency a magnet can be rapidly aged. Another use which seems to suggest itself at once, is in connection with induction coils whose resistance could be enormously reduced, and whose insulation could probably be much improved by cooling them in a bath of this strange liquid.—"Popular Science."

Niagara Power in Buffalo.

Two of the largest grain elevators in the world, built in Buffalo, N. Y., during the summer, at a cost of nearly \$1,000,000, are now successfully using vast quantities of the new Niagara Falls power, and within a few weeks, and as soon as the necessary electrical machinery can be installed, the wheels and machinery of the Union Drydock, one of the leading shipbuilding plants on the Great Lakes, will also be turned by the Falls current.

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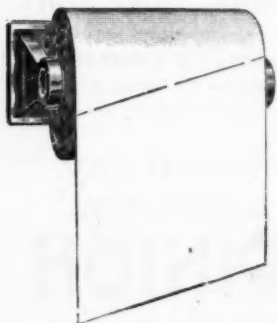
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